

College of Health and Human Sciences

College of Health and Human Sciences

Overview

From cancer researcher to preschool teacher and beyond, HHS prepares students for dynamic careers in the ever-expanding fields of health and human sciences. You'll be amazed by the wide-range of career options HHS majors can offer. Just click on the links below and see for yourself!

- Consumer Science
- Health and Kinesiology
- Health Sciences
- Hospitality and Tourism Management
- Human Development and Family Studies
- Nursing
- Nutrition Science
- Psychological Sciences
- Public Health Program
- Speech, Language, and Hearing Sciences

Today's competitive workplace demands more than just classroom learning. HHS offers students experiences beyond the classroom, such as undergraduate research, study abroad, real world healthcare training (clinicals) and internships.

Admissions

<http://www.admissions.purdue.edu/majors/colleges.php?ClgCd=HHS>

Admission to Teacher Education

Teacher Education Program Guidelines 2016-17

Advising

Academic advising is essential to student success at Purdue University. The central goal for the academic advising relationship is to assist students in the purposeful creation of an educational plan that includes curricular, co-curricular and extracurricular goals, objectives, and activities. Click the appropriate link below for a listing of advisors for that department. For information about academic advising and what you can expect, click here.

HHS Student Services Directory

Consumer Science

Health & Kinesiology

Health Sciences

Hospitality & Tourism Management

Human Development & Family Studies

Nursing

Nutrition Science

Psychology

Speech, Language, and Hearing Sciences

Contact Information

The HHS student services staff members are located in offices in the Civil Engineering Building, Johnson Hall of Nursing, Marriott Hall, Matthews Hall and Stone Hall. Our central office location is in Matthews Hall, Room 117. Please feel free to stop by and schedule an appointment, request information and a tour or just ask a question.

Office of Student Services
College of Health and Human Sciences
Matthews Hall, Room 117
812 West State Street
West Lafayette, IN 47907-2060
Phone: (765) 494-8533
Fax: (765) 494-9933
E-mail: hhsundergrad@purdue.edu

Department of Consumer Science

About the Department of Consumer Science

The **Department of Consumer Science** is passionate about providing transformative scholarship, teaching, and research in order to make a difference in people's lives. Our goal is to equip students with the education and experience needed to succeed and make an impact in their chosen fields. The faculty and staff serve the needs of students, industry, and the community by focusing talents and resources to improve people's lives and meet the needs of the future.

Our **undergraduate majors** in the department include: Financial Counseling and Planning, Selling and Sales Management, Retail Management, and Apparel Design and Technology.

Faculty

<http://www.purdue.edu/hhs/csr/directory/faculty/index.html>

Contact Information

The HHS student services staff members are located in offices in the Civil Engineering Building, Johnson Hall of Nursing, Marriott Hall, Matthews Hall and Stone Hall. Our central office location is in Matthews Hall, Room 126. Please feel free to stop by and schedule an appointment, request information and a tour or just ask a question.

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College of Health and Human Sciences
Matthews Room 126
812 West State Street
West Lafayette, IN 47907-2060
Phone: (765) 494-8533
Fax: (765) 494-9933
E-mail: hhsundergrad@purdue.edu

Graduate Information

For Graduate Information please see Consumer Science Graduate Program Information.

Financial Counseling and Planning, BS

About the Program

Do you enjoy math but want to do more than crunch numbers for a career? In financial counseling and planning, you'll learn how to combine your financial aptitude with communication skills to help others achieve financial security. The program is registered with the Certified Financial Planner Board, and successful completion of the program satisfies the education component of the CFP certification process. For more information, please visit <http://www.purdue.edu/hhs/csr/students/undergraduate/majors/fcpl.html>.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Financial Counseling and Planning include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

CSCI-BS
FCPL
120 credits

Major Requirements (33-34 credits)

AGEC 42500 - Estate Planning And Property Transfer

Credit Hours: 3.00. The ownership and transfer of farm business property. Includes tax and other implications of life estates, trust arrangements, sale of property, and charitable contributions. Typically offered Fall.

AGEC 45600 - Federal Income Tax Law

Credit Hours: 3.00. Introduction to the federal income tax laws applicable to individuals and small business with emphasis on the farming business. The course includes management implications and the policy basis for the tax law system. Techniques and practice for the preparation of selected forms will be included. There will be limited exposure to taxation of partnerships, corporations, estates, and to federal gift and estate tax law. Typically offered Spring.

CSR 10000 - Introduction To CSR

Credit Hours: 1.00. A workshop to familiarize students with the CSR department, department majors, advising resources, and major requirements. Special emphasis on basic freshman survival skills. Typically offered Fall.

CSR 20000 - Professional Development In Consumer Science

Credit Hours: 1.00. Professional Development in Consumer Sciences & Retailing is a required course that will provide the necessary techniques to manage job search skills and career development for both current and future professional needs. The covered topics will expose students to on-campus resources, opportunities to gain key networking skills, and establish their professional identity to better prepare students for the current job market. Typically offered Fall Spring.

CSR 30900 - Leadership Strategies

Credit Hours: 3.00. Provides knowledge of humanistic processes that contribute to development of effective leadership. Typically offered Spring.

CSR 33200 - Cross-Cultural Marketing And International Retailing

Credit Hours: 3.00. Examination of marketing/retail practices used to target domestic and global consumer market segments. Development of successful retail and marketing strategies is stressed. Typically offered Fall Spring.

CSR 34200 - Personal Finance

Credit Hours: 3.00. The class covers a comprehensive discussion of investments, consumer credit, insurance and retirement issues. The goal is to show how these components are interconnected in order to create a complete picture of financial health of an individual. Typically offered Spring Summer Fall. CTL:IPO 1811 Personal Finance

CSR 38600 - Risk Management

Credit Hours: 3.00. The course includes principles of insurance, analysis and evaluation of risk exposures, legal aspects of insurance, insurance needs and analysis, policy selection, and insurance company selection and due diligence. Types of insurance that are studied include: property and casualty, health, life, long-term care, disability and general business liability. Typically offered Fall.

CSR 48000 - Financial Counseling and Planning Internship

Credit Hours: 2.00 or 3.00. Supervised internship in the financial services industry. The experience will enable students to develop their professional interest and skills. Attendance at a pre-planning meeting required. Permission of department required. Typically offered Summer Fall Spring.

CSR 48100 - Ethics And Compliance In Financial Counseling And Planning

Credit Hours: 2.00. Examination of the ethical and compliance issues in the basic areas of investments, risk management, taxation, retirement and estate planning. Typically offered Fall Spring.

CSR 48400 - Consumer Investment And Savings Decisions

Credit Hours: 3.00. A survey of consumer investment alternatives, with emphasis on financial assets. Typically offered Fall Spring.

MGMT 31000 - Financial Management

Credit Hours: 3.00. Management of the financial affairs of the industrial enterprise. Working capital management, current asset management, capital budgeting, stock and bond valuation, and capital structure decisions. Typically offered Fall Spring Summer.

CSR 48500 - Case Studies In Financial Planning

Credit Hours: 3.00. Financial planning principles and practice. Course utilizes a case study approach toward financial planning for upper- and middle-income households. Business calculator required. Typically offered Fall Spring.

CSR 48600 - Retirement Planning And Employee Benefits

Credit Hours: 3.00. Analysis of employee benefit plans, retirement needs analysis, and types of retirement plans including employer sponsored plans and participant directed plans. Typically offered Fall Spring.

Required Courses in Other Departments (66-67 credits)

AGEC 33100 - Principles Of Selling In Agricultural Business

Credit Hours: 3.00. The principles of salesmanship and their application to the agricultural business. Topics include attitudes and value systems, basic behavioral patterns, the purchase decision process, relationship of sales to marketing, selling strategies, preparing for sales calls, making sales presentations, handling objections, and closing sales. Emphasis is placed on application of principles to real-world situations and on building selling skills through class projects. Requires class trips. Students will pay individual lodging or meal expenses when necessary. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

COM 21200 - Approaches To The Study Of Interpersonal Communication

Credit Hours: 3.00. A study of the basic characteristics of human communication and the theoretical and practical implications of these characteristics for various forms of oral communication. Typically offered Fall Spring Summer. CTL:ICM 1101 Interpersonal Communication

COM 32500 - Interviewing: Principles And Practice

Credit Hours: 3.00. Theory and practice of methods in selected interview settings: informational, employment, and persuasive. Emphasis on communication between two persons, questioning techniques, and the logical and psychological bases of interpersonal persuasion. Typically offered Fall Spring Summer.

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CS 23500 - Introduction To Organizational Computing

Credit Hours: 3.00. People and organizations, decision-making, information systems, telecommunications, desktop systems, integration tools, collaboration and groupware, multimedia, authoring multimedia documents, emerging technologies. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

ECON 25200 - Macroeconomics

Credit Hours: 3.00. Introduction to macroeconomic theory. The course develops a theoretical framework permitting an analysis of the forces affecting national income, employment, interest rates, and the rate of inflation. Emphasis is placed upon the role of government fiscal and monetary policy in promoting economic growth and stable prices. Typically offered Fall Spring Summer. CTL:ISH 1041 Macroeconomics

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

ENGL 42000 - Business Writing

Credit Hours: 3.00. Workplace writing in networked environments for management contexts. Emphasizes organizational context, project planning, document management, ethics, research, team writing. Typical genres include management memos, reports, letters, e-mail, resumes (print and online), oral presentations. Typically offered Summer Fall Spring.

ENGL 42100 - Technical Writing

Credit Hours: 3.00. Workplace writing in networked environments for technical contexts. Emphasizes context and user analysis, data analysis/display, project planning, document management, usability, ethics, research, team writing. Typical genres include technical reports, memos, documentation, Web sites. Typically offered Fall Spring Summer.

SPAN 42400 - Business Spanish

Credit Hours: 3.00. A study of the terminology and techniques used in commercial transactions, including the interpretation and writing of business materials. Development of the four language skills, with emphasis on writing and speaking. Typically offered Fall Spring Summer.

HTM 14100 - Financial Accounting For The Service Industries

Credit Hours: 3.00. Fundamental accounting principles and procedures applied to the hospitality and service industries. Includes study of the uniform system of accounts, financial statements, special purpose journals, and subsidiary ledgers unique to the hospitality and service industries. Typically offered Summer Fall Spring.

MGMT 20000 - Introductory Accounting

Credit Hours: 3.00. The objectives of the course are to help students: (1) understand what is in financial statements and what the statements say about a business, (2) identify the business activities that caused the amounts that appear in the statements, and (3) understand how, when, and at what amount the effects of manager and employee actions will appear in the statements. Typically offered Fall Spring Summer. CTL:IPO 1801 Accounting I

HTM 24100 - Managerial Accounting And Financial Management In Hospitality Operations

Credit Hours: 3.00. Managerial and financial analyses of numerical data used for decision-making. Consideration of systems, techniques, information types, and presentational forms used by hospitality management. Emphasis on situations oriented to the hospitality industry. Typically offered Summer Fall Spring.

MGMT 20100 - Management Accounting I

Credit Hours: 3.00. An introduction to management's internal use of accounting information--for decision making, production management, product costing, motivating and evaluating performance, and budgeting. Typically offered Fall Spring Summer. CCN:IPO 1802 Accounting II

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models,

exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

MGMT 32300 - Principles Of Marketing

Credit Hours: 3.00. This mixed lecture and case course provides an overview of the functional area of marketing. The course is taught from a managerial perspective; it focuses on inputs to the marketing decision-making process, the process itself, and its results. No credit for students in the School of Management, except economics majors. Typically offered Fall Spring.

MGMT 45500 - Legal Background For Business I

Credit Hours: 3.00. The nature and place of law in our society, national and international, social and moral bases of law enactment, regulation of business, legal liability, and enforcement procedures. Special emphasis on torts, contracts, and agency. No credit to students in the School of Management. Typically offered Fall Spring Summer.

MGMT 45600 - Legal Foundations For Business II

Credit Hours: 3.00. A study of commercial law as prescribed by the Uniform Commercial Code, including the law of sales, documents of title, negotiable instruments, and the law relating to security interests. Additional material is presented covering the legal aspects of real estate transactions and personal property transfer. Typically offered Fall Spring.

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

- [Humanities Core] - select from University list - Credit Hours: 3.00
- [Science Core] - select from University list - Credit Hours: 3.00
- [Science Core] - select from University list - Credit Hours: 3.00

STAT Selective - Choose ONE

Statistics selective must be completed with a "C-" or better

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

STAT 22500 - Introduction To Probability Models

Credit Hours: 3.00. An introduction to basic probability. Emphasis is placed on formulation of models and applications. Probability calculus, standard distributions, random variables, and moments. Credit cannot be given for more than one of STAT 22500, STAT 31100, or STAT 41600. Typically offered Summer Fall Spring.

STAT 50100 - Experimental Statistics I

Credit Hours: 3.00. Concepts and methods of applied statistics. Exploratory analysis of data. Sample design and experimental design. Normal distributions. Sampling distributions. Confidence intervals and tests of hypotheses for one and two samples. Inference for contingency tables, regression and correlation, and one-way analysis of variance. Use of the SAS statistical software. Intended primarily for students who have not had calculus. Not open to students in mathematical sciences or engineering. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, STAT 35000, STAT 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: College Algebra. Typically offered Fall Spring Summer.

SOC 38200 - Introduction To Statistics In Sociology

Credit Hours: 3.00. Introduction to the basic techniques of statistical analysis applicable to sociological data. Elementary descriptive statistics and statistical inference. Introduction to multivariate analysis. Typically offered Fall Spring.

Electives (19-21 credits)

120 semester credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

CSR 10000 - Introduction To CSR

Credit Hours: 1.00. A workshop to familiarize students with the CSR department, department majors, advising resources, and major requirements. Special emphasis on basic freshman survival skills. Typically offered Fall.

- Quantitative Reasoning ⁽¹⁾ (UCC) - Credit Hours: 3.00

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CS 23500 - Introduction To Organizational Computing

Credit Hours: 3.00. People and organizations, decision-making, information systems, telecommunications, desktop systems, integration tools, collaboration and groupware, multimedia, authoring multimedia documents, emerging technologies. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

- Humanities ₍₆₎ (UCC) - Credit Hours: 3.00

16 - 17 Credits

Spring 1st Year

- Science 1 of 2 ₍₂₎ (UCC) - Credit Hours: 2.00 - 4.00

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

- Free Elective - Credit Hours: 3.00

15 Credits

Fall 2nd Year

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

- Science 2 of 2 (2) (UCC) - Credit Hours: 3.00

HTM 14100 - Financial Accounting For The Service Industries

Credit Hours: 3.00. Fundamental accounting principles and procedures applied to the hospitality and service industries. Includes study of the uniform system of accounts, financial statements, special purpose journals, and subsidiary ledgers unique to the hospitality and service industries. Typically offered Summer Fall Spring.

MGMT 20000 - Introductory Accounting

Credit Hours: 3.00. The objectives of the course are to help students: (1) understand what is in financial statements and what the statements say about a business, (2) identify the business activities that caused the amounts that appear in the statements, and (3) understand how, when, and at what amount the effects of manager and employee actions will appear in the statements. Typically offered Fall Spring Summer. CTL:IPO 1801 Accounting I

ECON 25200 - Macroeconomics

Credit Hours: 3.00. Introduction to macroeconomic theory. The course develops a theoretical framework permitting an analysis of the forces affecting national income, employment, interest rates, and the rate of inflation. Emphasis is placed upon the role of government fiscal and monetary policy in promoting economic growth and stable prices. Typically offered Fall Spring Summer. CTL:ISH 1041 Macroeconomics

- Free Elective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- STAT Selective ⁽⁴⁾ - Credit Hours: 3.00

CSR 34200 - Personal Finance

Credit Hours: 3.00. The class covers a comprehensive discussion of investments, consumer credit, insurance and retirement issues. The goal is to show how these components are interconnected in order to create a complete picture of financial health of an individual. Typically offered Spring Summer Fall. CTL:IPO 1811 Personal Finance

HTM 24100 - Managerial Accounting And Financial Management In Hospitality Operations

Credit Hours: 3.00. Managerial and financial analyses of numerical data used for decision-making. Consideration of systems, techniques, information types, and presentational forms used by hospitality management. Emphasis on situations oriented to the hospitality industry. Typically offered Summer Fall Spring.

MGMT 20100 - Management Accounting I

Credit Hours: 3.00. An introduction to management's internal use of accounting information--for decision making, production management, product costing, motivating and evaluating performance, and budgeting. Typically offered Fall Spring Summer. CCN:IPO 1802 Accounting II

- Free Elective - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

CSR 38600 - Risk Management

Credit Hours: 3.00. The course includes principles of insurance, analysis and evaluation of risk exposures, legal aspects of insurance, insurance needs and analysis, policy selection, and insurance company selection and due diligence. Types of insurance that are studied include: property and casualty, health, life, long-term care, disability and general business liability. Typically offered Fall.

AGEC 42500 - Estate Planning And Property Transfer

Credit Hours: 3.00. The ownership and transfer of farm business property. Includes tax and other implications of life estates, trust arrangements, sale of property, and charitable contributions. Typically offered Fall.

COM 21200 - Approaches To The Study Of Interpersonal Communication

Credit Hours: 3.00. A study of the basic characteristics of human communication and the theoretical and practical implications of these characteristics for various forms of oral communication. Typically offered Fall Spring Summer. CTL:ICM 1101
Interpersonal Communication

MGMT 45500 - Legal Background For Business I

Credit Hours: 3.00. The nature and place of law in our society, national and international, social and moral bases of law enactment, regulation of business, legal liability, and enforcement procedures. Special emphasis on torts, contracts, and agency. No credit to students in the School of Management. Typically offered Fall Spring Summer.

- Free Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

CSR 30900 - Leadership Strategies

Credit Hours: 3.00. Provides knowledge of humanistic processes that contribute to development of effective leadership. Typically offered Spring.

AGEC 45600 - Federal Income Tax Law

Credit Hours: 3.00. Introduction to the federal income tax laws applicable to individuals and small business with emphasis on the farming business. The course includes management implications and the policy basis for the tax law system. Techniques and practice for the preparation of selected forms will be included. There will be limited exposure to taxation of partnerships, corporations, estates, and to federal gift and estate tax law. Typically offered Spring.

AGEC 33100 - Principles Of Selling In Agricultural Business

Credit Hours: 3.00. The principles of salesmanship and their application to the agricultural business. Topics include attitudes and value systems, basic behavioral patterns, the purchase decision process, relationship of sales to marketing, selling strategies, preparing for sales calls, making sales presentations, handling objections, and closing sales. Emphasis is placed on application of principles to real-world situations and on building selling skills through class projects. Requires class trips. Students will pay individual lodging or meal expenses when necessary. Typically offered Fall Spring.

COM 32500 - Interviewing: Principles And Practice

Credit Hours: 3.00. Theory and practice of methods in selected interview settings: informational, employment, and persuasive. Emphasis on communication between two persons, questioning techniques, and the logical and psychological bases of interpersonal persuasion. Typically offered Fall Spring Summer.

CSR 48100 - Ethics And Compliance In Financial Counseling And Planning

Credit Hours: 2.00. Examination of the ethical and compliance issues in the basic areas of investments, risk management, taxation, retirement and estate planning. Typically offered Fall Spring.

CSR 20000 - Professional Development In Consumer Science

Credit Hours: 1.00. Professional Development in Consumer Sciences & Retailing is a required course that will provide the necessary techniques to manage job search skills and career development for both current and future professional needs. The covered topics will expose students to on-campus resources, opportunities to gain key networking skills, and establish their professional identity to better prepare students for the current job market. Typically offered Fall Spring.

15 Credits

Summer 3rd Year

CSR 48000 - Financial Counseling and Planning Internship

Credit Hours: 2.00 or 3.00. Supervised internship in the financial services industry. The experience will enable students to develop their professional interest and skills. Attendance at a pre-planning meeting required. Permission of department required. Typically offered Summer Fall Spring.

- Field Experience - Credit Hour: 2.00 - 3.00
 - ** NOTE: Students may opt for the Study Abroad Internship Program in Dublin, London, or Sydney (6 credits) or complete the Interns for Indiana Internship (3 credits) to fulfil this requirement.

2-3 Credits

Fall 4th Year

CSR 48400 - Consumer Investment And Savings Decisions

Credit Hours: 3.00. A survey of consumer investment alternatives, with emphasis on financial assets. Typically offered Fall Spring.

CSR 48600 - Retirement Planning And Employee Benefits

Credit Hours: 3.00. Analysis of employee benefit plans, retirement needs analysis, and types of retirement plans including employer sponsored plans and participant directed plans. Typically offered Fall Spring.

MGMT 32300 - Principles Of Marketing

Credit Hours: 3.00. This mixed lecture and case course provides an overview of the functional area of marketing. The course is taught from a managerial perspective; it focuses on inputs to the marketing decision-making process, the process itself, and its results. No credit for students in the School of Management, except economics majors. Typically offered Fall Spring.

MGMT 45600 - Legal Foundations For Business II

Credit Hours: 3.00. A study of commercial law as prescribed by the Uniform Commercial Code, including the law of sales, documents of title, negotiable instruments, and the law relating to security interests. Additional material is presented covering the legal aspects of real estate transactions and personal property transfer. Typically offered Fall Spring.

- Free Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

CSR 48500 - Case Studies In Financial Planning

Credit Hours: 3.00. Financial planning principles and practice. Course utilizes a case study approach toward financial planning for upper- and middle-income households. Business calculator required. Typically offered Fall Spring.

ENGL 42000 - Business Writing

Credit Hours: 3.00. Workplace writing in networked environments for management contexts. Emphasizes organizational context, project planning, document management, ethics, research, team writing. Typical genres include management memos, reports, letters, e-mail, resumes (print and online), oral presentations. Typically offered Summer Fall Spring.

ENGL 42100 - Technical Writing

Credit Hours: 3.00. Workplace writing in networked environments for technical contexts. Emphasizes context and user analysis, data analysis/display, project planning, document management, usability, ethics, research, team writing. Typical genres include technical reports, memos, documentation, Web sites. Typically offered Fall Spring Summer.

CSR 33200 - Cross-Cultural Marketing And International Retailing

Credit Hours: 3.00. Examination of marketing/retail practices used to target domestic and global consumer market segments. Development of successful retail and marketing strategies is stressed. Typically offered Fall Spring.

- Study Abroad ⁽⁵⁾ - Credit Hours: 3.00
- Free Elective - Credit Hours: 2.00

12 Credits

Note

- (1) **Quantitative Reasoning:** MA 15555 or higher from the University Core Curriculum.
- (2) **Science Options:** Choose two courses selected from the University Core Curriculum Science options (4 - 8 hours).
- (3) STAT 11300 meets the University Core Curriculum Science, Technology & Society competency.
- (4) **STAT Selective:** Choose one additional Statistics course from STAT 30100, STAT 22500, STAT 50100, SOC 38200, or equivalent.
- (5) Approved Study Abroad Experience is an option.
- (6) **Humanities:** 3 hours selected from the University Core Curriculum humanities options.

CSR 48500 **CAPSTONE COURSE:** Students should be mindful of the pre-requisite courses and mandatory sequencing leading up to this course as some pre-requisites are only offered one time per year! Prerequisites: AGECE 42500 (a fall only course); AGECE 45600 (a spring only course); CSR 38600 and CSR 48600.

PUWL: Must be taken at Purdue University in accordance with the CFP®

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Retail Management, BS

About the Program

Retail management prepares students for careers in merchandising, management, and/or marketing consumer goods and services in a variety of retail settings. Students develop critical thinking communication skills that allows them to secure positions in industries and businesses such as e-commerce enterprises, major consumer product firms, and retail companies. For more information, please visit:

<http://www.purdue.edu/hhs/csr/students/undergraduate/majors/remg.html>.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Retail Management include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

CSCI-BS
REMG
120 credits

Major Requirements (38-40 credits)

CSR 10000 - Introduction To CSR

Credit Hours: 1.00. A workshop to familiarize students with the CSR department, department majors, advising resources, and major requirements. Special emphasis on basic freshman survival skills. Typically offered Fall.

CSR 20000 - Professional Development In Consumer Science

Credit Hours: 1.00. Professional Development in Consumer Sciences & Retailing is a required course that will provide the necessary techniques to manage job search skills and career development for both current and future professional needs. The covered topics will expose students to on-campus resources, opportunities to gain key networking skills, and establish their professional identity to better prepare students for the current job market. Typically offered Fall Spring.

CSR 20900 - Introduction To Retail Management

Credit Hours: 3.00. Retail career paths, management training, merchandise control, organization and service structure, and a comparison of store types. Typically offered Fall Spring.

CSR 21500 - Textiles

Credit Hours: 2.00. A basic textiles course dealing with the properties of textile fibers and fabrics and their impact on product performance and consumer satisfaction. Emphasis on retail, apparel, and interior design applications. Typically offered Spring.

CSR 28200 - Customer Relations Management

Credit Hours: 3.00. A course that provides insight into the structure and working of customer relations management and its role in business and government agency. Analysis of how consumer needs, complaints, and education are handled. Customer relations' management in the real world and techniques used in managing customer relations toward the goal of maximizing customer satisfaction. This course has a real world focus and is more applied than the usual introductory course. Typically offered Fall Spring.

CSR 30000 - Field Experience In Retail Management

Credit Hours: 1.00. Approved in-service training, a total of 140 hours; development of activities plan; and report of activities. Recommended for semesters 3,4,5, or 6. Advance approval of director and employer and attendance at pre- and post-organizational meeting is required. Permission of instructor required. Typically offered Fall Spring Summer.

CSR 39800 - International Special Topics

Credit Hours: 1.00 to 6.00. Course taken during an International experience that is recognized by the University. Permission of department required. Typically offered Summer Fall Spring.

CSR 40300 - Retail Management Internship

Credit Hours: 3.00. A supervised full-time internship in retail and related industries. This experience will enable students to further develop their professional interests and skills. Prior field experience and completion of application and pre-approval of internship by internship director and attendance at pre- and post-organization meetings is required. Permission of department required. Typically offered Summer.

CSR 30900 - Leadership Strategies

Credit Hours: 3.00. Provides knowledge of humanistic processes that contribute to development of effective leadership. Typically offered Spring.

CSR 32300 - Visual Merchandising

Credit Hours: 3.00. Creative experimentation, production, and analysis of promotional formats for merchandising of product in a retail setting. Study of the elements and principles of design and their application for promotion of retail merchandise and/or services. Typically offered Spring.

CSR 33100 - Consumer Behavior

Credit Hours: 3.00. An interdisciplinary survey of consumer behavior theory focused on psychological, sociological, and cultural influences on consumer choice and use of products and services. Credit will not be given for both CSR 33100 and PSY 28500. Typically offered Fall Spring.

CSR 33200 - Cross-Cultural Marketing And International Retailing

Credit Hours: 3.00. Examination of marketing/retail practices used to target domestic and global consumer market segments. Development of successful retail and marketing strategies is stressed. Typically offered Fall Spring.

CSR 34200 - Personal Finance

Credit Hours: 3.00. The class covers a comprehensive discussion of investments, consumer credit, insurance and retirement issues. The goal is to show how these components are interconnected in order to create a complete picture of financial health of an individual. Typically offered Spring Summer Fall. CTL:IPO 1811 Personal Finance

CSR 34400 - Fundamentals Of Negotiations

Credit Hours: 3.00. This course is designed to be relevant to the broad spectrum of bargaining "problems" that are traditionally faced by the manager, sales personnel and financial advisors. The course explores the processes of bargaining and negotiation as social and managerial activities. Special emphasis will be given to the areas of interpersonal and interpersonal and intergroup conflict, in addition to the interpersonal influence techniques and the tactics and strategies involved with improved bargaining and negotiation. The major purpose of the course is for each student to gain insight into his or her own negotiating style and to become a more effective negotiator, as well as a more astute observer of social process. The course will involve extensive use of cases, role-plays, and related participative activities, enhanced by rigorous self-review and introspection. Typically offered Fall Spring Summer.

CSR 40100 - Buying Of Merchandise

Credit Hours: 3.00. Principles of volume buying applicable to department, chain, specialty, and independent stores. Typically offered Fall Spring.

CSR 40400 - Strategic Issues For Sales And Retailing

Credit Hours: 3.00. Analysis of selected retail organizations and their channel partners through in-depth discussion of contemporary paradigms in strategic marketing for both sales and retailing perspectives and their applications to management. Typically offered Fall Spring Summer.

CSR 40600 - E-Retailing

Credit Hours: 3.00. To provide understanding of the technological and retail infrastructure that underlines doing retailing over the internet. Build an understanding of business strategies over the net. To identify management issues and consumer issues in e-retailing. Typically offered Fall.

Required Courses in Other Departments (66-79 credits)

AGEC 33100 - Principles Of Selling In Agricultural Business

Credit Hours: 3.00. The principles of salesmanship and their application to the agricultural business. Topics include attitudes and value systems, basic behavioral patterns, the purchase decision process, relationship of sales to marketing, selling strategies, preparing for sales calls, making sales presentations, handling objections, and closing sales. Emphasis is placed on application of principles to real-world situations and on building selling skills through class projects. Requires class trips. Students will pay individual lodging or meal expenses when necessary. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

COM 25600 - Introduction To Advertising

Credit Hours: 3.00. An analysis of commercial persuasion from colonial times to the era of mass communication. The course examines the structure of advertising messages, how they are adapted to specific audiences, and the social settings in which they occur. Typically offered Fall Spring Summer.

COM 32500 - Interviewing: Principles And Practice

Credit Hours: 3.00. Theory and practice of methods in selected interview settings: informational, employment, and persuasive.

Emphasis on communication between two persons, questioning techniques, and the logical and psychological bases of interpersonal persuasion. Typically offered Fall Spring Summer.

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

CS 23500 - Introduction To Organizational Computing

Credit Hours: 3.00. People and organizations, decision-making, information systems, telecommunications, desktop systems, integration tools, collaboration and groupware, multimedia, authoring multimedia documents, emerging technologies. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

ECON 25200 - Macroeconomics

Credit Hours: 3.00. Introduction to macroeconomic theory. The course develops a theoretical framework permitting an analysis

of the forces affecting national income, employment, interest rates, and the rate of inflation. Emphasis is placed upon the role of government fiscal and monetary policy in promoting economic growth and stable prices. Typically offered Fall Spring Summer.
CTL:ISH 1041 Macroeconomics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

ENGL 42000 - Business Writing

Credit Hours: 3.00. Workplace writing in networked environments for management contexts. Emphasizes organizational context, project planning, document management, ethics, research, team writing. Typical genres include management memos, reports, letters, e-mail, resumes (print and online), oral presentations. Typically offered Summer Fall Spring.

ENGL 42100 - Technical Writing

Credit Hours: 3.00. Workplace writing in networked environments for technical contexts. Emphasizes context and user analysis, data analysis/display, project planning, document management, usability, ethics, research, team writing. Typical genres include technical reports, memos, documentation, Web sites. Typically offered Fall Spring Summer.

SPAN 42400 - Business Spanish

Credit Hours: 3.00. A study of the terminology and techniques used in commercial transactions, including the interpretation and writing of business materials. Development of the four language skills, with emphasis on writing and speaking. Typically offered Fall Spring Summer.

HTM 14100 - Financial Accounting For The Service Industries

Credit Hours: 3.00. Fundamental accounting principles and procedures applied to the hospitality and service industries. Includes study of the uniform system of accounts, financial statements, special purpose journals, and subsidiary ledgers unique to the hospitality and service industries. Typically offered Summer Fall Spring.

MGMT 20000 - Introductory Accounting

Credit Hours: 3.00. The objectives of the course are to help students: (1) understand what is in financial statements and what the statements say about a business, (2) identify the business activities that caused the amounts that appear in the statements, and (3) understand how, when, and at what amount the effects of manager and employee actions will appear in the statements. Typically offered Fall Spring Summer. CTL:IPO 1801 Accounting I

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

MGMT 32300 - Principles Of Marketing

Credit Hours: 3.00. This mixed lecture and case course provides an overview of the functional area of marketing. The course is taught from a managerial perspective; it focuses on inputs to the marketing decision-making process, the process itself, and its results. No credit for students in the School of Management, except economics majors. Typically offered Fall Spring.

MGMT 45500 - Legal Background For Business I

Credit Hours: 3.00. The nature and place of law in our society, national and international, social and moral bases of law enactment, regulation of business, legal liability, and enforcement procedures. Special emphasis on torts, contracts, and agency. No credit to students in the School of Management. Typically offered Fall Spring Summer.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

- OLS Selective - select 3 credit course numbered 10000-59999 except OLS 25200 - Credit Hours: 3.00

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

STAT 22500 - Introduction To Probability Models

Credit Hours: 3.00. An introduction to basic probability. Emphasis is placed on formulation of models and applications. Probability calculus, standard distributions, random variables, and moments. Credit cannot be given for more than one of STAT 22500, STAT 31100, or STAT 41600. Typically offered Summer Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

IT 34200 - Introduction To Statistical Quality

Credit Hours: 3.00. Basic concepts of quality systems in business and manufacturing settings are presented. Basic statistical methods as applied to quality control, and an introduction to sampling plans are included. Field trips may be required. Typically offered Fall Spring Summer.

(If STAT 11300 selected, fulfills **Science, Technology, & Society Core**)

- [Humanities Core] - select from University list - Credit Hours: 3.00

- [Science Core] - select from University list - Credit Hours: 3.00
- [Science Core] - select from University list - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list (IF STAT 11300 is selected for other requirements, this requirement is fulfilled) - Credit Hours: 0.00 - 3.00

Select a Minor (Purdue West Lafayette campus) or Entrepreneurship Certificate (6-15 credits)

Electives (1-16 credits)

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

120 semester credits required for Bachelor of Science degree

Program Requirements

Fall 1st Year

CSR 10000 - Introduction To CSR

Credit Hours: 1.00. A workshop to familiarize students with the CSR department, department majors, advising resources, and major requirements. Special emphasis on basic freshman survival skills. Typically offered Fall.

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CS 23500 - Introduction To Organizational Computing

Credit Hours: 3.00. People and organizations, decision-making, information systems, telecommunications, desktop systems, integration tools, collaboration and groupware, multimedia, authoring multimedia documents, emerging technologies. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

14 Credits

Spring 1st Year

CSR 20900 - Introduction To Retail Management

Credit Hours: 3.00. Retail career paths, management training, merchandise control, organization and service structure, and a comparison of store types. Typically offered Fall Spring.

- SCIENCE 1 of 2 (2) (UCC) - Credit Hours: 3.00

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

15 Credits

Fall 2nd Year

CSR 28200 - Customer Relations Management

Credit Hours: 3.00. A course that provides insight into the structure and working of customer relations management and its role in business and government agency. Analysis of how consumer needs, complaints, and education are handled. Customer relations' management in the real world and techniques used in managing customer relations toward the goal of maximizing customer satisfaction. This course has a real world focus and is more applied than the usual introductory course. Typically offered Fall Spring.

- SCIENCE 2 of 2 (2) (UCC) - Credit Hours: 3.00

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

- MINOR/CERT ₍₆₎ - Credit Hours: 3.00

CSR 20000 - Professional Development In Consumer Science

Credit Hours: 1.00. Professional Development in Consumer Sciences & Retailing is a required course that will provide the necessary techniques to manage job search skills and career development for both current and future professional needs. The covered topics will expose students to on-campus resources, opportunities to gain key networking skills, and establish their professional identity to better prepare students for the current job market. Typically offered Fall Spring.

- Free Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

- OLS Selective - Credit Hours: 3.00

CSR 33100 - Consumer Behavior

Credit Hours: 3.00. An interdisciplinary survey of consumer behavior theory focused on psychological, sociological, and cultural influences on consumer choice and use of products and services. Credit will not be given for both CSR 33100 and PSY 28500. Typically offered Fall Spring.

HTM 14100 - Financial Accounting For The Service Industries

Credit Hours: 3.00. Fundamental accounting principles and procedures applied to the hospitality and service industries. Includes study of the uniform system of accounts, financial statements, special purpose journals, and subsidiary ledgers unique to the hospitality and service industries. Typically offered Summer Fall Spring.

MGMT 20000 - Introductory Accounting

Credit Hours: 3.00. The objectives of the course are to help students: (1) understand what is in financial statements and what the statements say about a business, (2) identify the business activities that caused the amounts that appear in the statements, and (3) understand how, when, and at what amount the effects of manager and employee actions will appear in the statements. Typically offered Fall Spring Summer. CTL:IPO 1801 Accounting I

MGMT 20010 - Business Accounting

Credit Hours: 3.00. The two primary objectives are to teach the skills to produce financial information-to send the relevant signals to decision makers; and to teach the skills to interpret the financial report-to receive the signals. To meet these objectives the students will gain an understanding of the reasoning behind the processes used to record financial information and the manner in which it is reported to external decision makers; gain an understanding of the four basic statements; and an understanding of the importance of financial statement information in interpreting the performance of organizations. (Not a prerequisite for MGMT 20100.)Typically offered Fall Spring Summer.

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

- MINOR/CERT ₍₆₎ - Credit Hours: 3.00

15 Credits

Fall 3rd Year

AGEC 33100 - Principles Of Selling In Agricultural Business

Credit Hours: 3.00. The principles of salesmanship and their application to the agricultural business. Topics include attitudes and value systems, basic behavioral patterns, the purchase decision process, relationship of sales to marketing, selling strategies, preparing for sales calls, making sales presentations, handling objections, and closing sales. Emphasis is placed on application of principles to real-world situations and on building selling skills through class projects. Requires class trips. Students will pay individual lodging or meal expenses when necessary. Typically offered Fall Spring.

MGMT 32300 - Principles Of Marketing

Credit Hours: 3.00. This mixed lecture and case course provides an overview of the functional area of marketing. The course is taught from a managerial perspective; it focuses on inputs to the marketing decision-making process, the process itself, and its results. No credit for students in the School of Management, except economics majors. Typically offered Fall Spring.

COM 25600 - Introduction To Advertising

Credit Hours: 3.00. An analysis of commercial persuasion from colonial times to the era of mass communication. The course examines the structure of advertising messages, how they are adapted to specific audiences, and the social settings in which they occur. Typically offered Fall Spring Summer.

CSR 40100 - Buying Of Merchandise

Credit Hours: 3.00. Principles of volume buying applicable to department, chain, specialty, and independent stores. Typically offered Fall Spring.

- Humanities ⁽⁴⁾ (UCC) - Credit Hours: 3.00

15 Credits

Spring 3rd Year

CSR 30900 - Leadership Strategies

Credit Hours: 3.00. Provides knowledge of humanistic processes that contribute to development of effective leadership. Typically offered Spring.

CSR 33200 - Cross-Cultural Marketing And International Retailing

Credit Hours: 3.00. Examination of marketing/retail practices used to target domestic and global consumer market segments. Development of successful retail and marketing strategies is stressed. Typically offered Fall Spring.

CSR 21500 - Textiles

Credit Hours: 2.00. A basic textiles course dealing with the properties of textile fibers and fabrics and their impact on product performance and consumer satisfaction. Emphasis on retail, apparel, and interior design applications. Typically offered Spring.

CSR 32300 - Visual Merchandising

Credit Hours: 3.00. Creative experimentation, production, and analysis of promotional formats for merchandising of product in a retail setting. Study of the elements and principles of design and their application for promotion of retail merchandise and/or services. Typically offered Spring.

COM 32500 - Interviewing: Principles And Practice

Credit Hours: 3.00. Theory and practice of methods in selected interview settings: informational, employment, and persuasive. Emphasis on communication between two persons, questioning techniques, and the logical and psychological bases of interpersonal persuasion. Typically offered Fall Spring Summer.

14 Credits

Summer 3rd Year

CSR 30000 - Field Experience In Retail Management

Credit Hours: 1.00. Approved in-service training, a total of 140 hours; development of activities plan; and report of activities. Recommended for semesters 3,4,5, or 6. Advance approval of director and employer and attendance at pre- and post-organizational meeting is required. Permission of instructor required. Typically offered Fall Spring Summer.

- Field Experience - Credit Hours: 1.00
 - Students may opt for the Study Abroad Internship Program in Dublin, London, or Sydney (6 credits) or complete the Interns for Indiana Internship (3 credits) to fulfill this requirement.

1 Credits

Fall 4th Year

CSR 40600 - E-Retailing

Credit Hours: 3.00. To provide understanding of the technological and retail infrastructure that underlines doing retailing over the internet. Build an understanding of business strategies over the net. To identify management issues and consumer issues in e-retailing. Typically offered Fall.

CSR 34400 - Fundamentals Of Negotiations

Credit Hours: 3.00. This course is designed to be relevant to the broad spectrum of bargaining "problems" that are traditionally faced by the manager, sales personnel and financial advisors. The course explores the processes of bargaining and negotiation as social and managerial activities. Special emphasis will be given to the areas of interpersonal and interpersonal and intergroup conflict, in addition to the interpersonal influence techniques and the tactics and strategies involved with improved bargaining and negotiation. The major purpose of the course is for each student to gain insight into his or her own negotiating style and to become a more effective negotiator, as well as a more astute observer of social process. The course will involve extensive use of

cases, role-plays, and related participative activities, enhanced by rigorous self-review and introspection. Typically offered Fall Spring Summer.

CSR 34200 - Personal Finance

Credit Hours: 3.00. The class covers a comprehensive discussion of investments, consumer credit, insurance and retirement issues. The goal is to show how these components are interconnected in order to create a complete picture of financial health of an individual. Typically offered Spring Summer Fall. CTL:IPO 1811 Personal Finance

CSR 40400 - Strategic Issues For Sales And Retailing

Credit Hours: 3.00. Analysis of selected retail organizations and their channel partners through in-depth discussion of contemporary paradigms in strategic marketing for both sales and retailing perspectives and their applications to management. Typically offered Fall Spring Summer.

- MINOR/CERT ₍₆₎ or Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- MINOR/CERT ₍₆₎ - Credit Hours: 3.00
- MINOR/CERT ₍₆₎ or Elective - Credit Hours: 3.00

ENGL 42000 - Business Writing

Credit Hours: 3.00. Workplace writing in networked environments for management contexts. Emphasizes organizational context, project planning, document management, ethics, research, team writing. Typical genres include management memos, reports, letters, e-mail, resumes (print and online), oral presentations. Typically offered Summer Fall Spring.

ENGL 42100 - Technical Writing

Credit Hours: 3.00. Workplace writing in networked environments for technical contexts. Emphasizes context and user analysis, data analysis/display, project planning, document management, usability, ethics, research, team writing. Typical genres include technical reports, memos, documentation, Web sites. Typically offered Fall Spring Summer.

MGMT 45500 - Legal Background For Business I

Credit Hours: 3.00. The nature and place of law in our society, national and international, social and moral bases of law

enactment, regulation of business, legal liability, and enforcement procedures. Special emphasis on torts, contracts, and agency. No credit to students in the School of Management. Typically offered Fall Spring Summer.

- Free Elective or Sci Tech Soc ⁽³⁾ - Credit Hours: 3.00

15 Credits

Note

- (1) **Quantitative Reasoning:** MA 15555 or higher from the University Core Curriculum
- (2) **Science Options:** Two courses selected from the University Core Curriculum Science options (4 - 8 hours).
- (3) STAT 11300 meets the University Core Curriculum Science, Technology & Society competency. Student may choose STAT 22500, STAT 30100, or IT 34200 to fulfill the Statistics requirement but will need an additional Science, Technology & Society course.
- (4) **Humanities:** 2-4 credits selected from the University Core Curriculum Humanities options.
- (5) **Approved Study Abroad** Experience is an option.
- (6) Complete a MINOR or CERTIFICATE to meet degree requirements.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Selling and Sales Management, BS

About the Program

Professional selling is one of the fastest growing segments in business, creating a strong demand for technically sophisticated and professional sales experts. You'll develop strong skills in communication, consumer behavior, customer relations, sales management, business, and marketing. For more information, please visit:
<http://www.purdue.edu/hhs/csr/students/undergraduate/majors/sell.html>.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Selling and Sales Management include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

CSCI-BS
SELL
120 credits

Major Requirements (36-38 credits)

AGEC 33100 - Principles Of Selling In Agricultural Business

Credit Hours: 3.00. The principles of salesmanship and their application to the agricultural business. Topics include attitudes and value systems, basic behavioral patterns, the purchase decision process, relationship of sales to marketing, selling strategies, preparing for sales calls, making sales presentations, handling objections, and closing sales. Emphasis is placed on application of principles to real-world situations and on building selling skills through class projects. Requires class trips. Students will pay individual lodging or meal expenses when necessary. Typically offered Fall Spring.

CSR 10000 - Introduction To CSR

Credit Hours: 1.00. A workshop to familiarize students with the CSR department, department majors, advising resources, and major requirements. Special emphasis on basic freshman survival skills. Typically offered Fall.

CSR 20000 - Professional Development In Consumer Science

Credit Hours: 1.00. Professional Development in Consumer Sciences & Retailing is a required course that will provide the necessary techniques to manage job search skills and career development for both current and future professional needs. The covered topics will expose students to on-campus resources, opportunities to gain key networking skills, and establish their professional identity to better prepare students for the current job market. Typically offered Fall Spring.

CSR 28200 - Customer Relations Management

Credit Hours: 3.00. A course that provides insight into the structure and working of customer relations management and its role in business and government agency. Analysis of how consumer needs, complaints, and education are handled. Customer relations' management in the real world and techniques used in managing customer relations toward the goal of maximizing customer satisfaction. This course has a real world focus and is more applied than the usual introductory course. Typically offered Fall Spring.

CSR 30700 - Field Experience In Selling And Sales Management

Credit Hours: 1.00. Approved in-service training and supervised work experience in selling and sales management. Total of 140 hours required with in-depth report and analysis of activities. Permission of department required. Typically offered Fall Spring Summer.

CSR 39800 - International Special Topics

Credit Hours: 1.00 to 6.00. Course taken during an International experience that is recognized by the University. Permission of department required. Typically offered Summer Fall Spring.

CSR 30900 - Leadership Strategies

Credit Hours: 3.00. Provides knowledge of humanistic processes that contribute to development of effective leadership. Typically offered Spring.

CSR 31500 - Relationship Selling

Credit Hours: 3.00. This course focuses on long term relationship selling. The course is organized around a seven step selling process which has proven to be effective. The course adds to this process some principles of marketing and business strategy. The elements are necessary for the success of professional salesperson both in successful prospecting and making strategic choices as to how to allocate their time within the territory. Important to the learning process is actually practice of principles. Students will do various exercises of principles such as prospecting and negotiation. At the end of the semester, students will hone the skills learned through the semester with a series of roll plays designed to put them in position of both seller and buyer. Typically offered Fall Spring Summer.

CSR 33100 - Consumer Behavior

Credit Hours: 3.00. An interdisciplinary survey of consumer behavior theory focused on psychological, sociological, and cultural influences on consumer choice and use of products and services. Credit will not be given for both CSR 33100 and PSY 28500. Typically offered Fall Spring.

CSR 33200 - Cross-Cultural Marketing And International Retailing

Credit Hours: 3.00. Examination of marketing/retail practices used to target domestic and global consumer market segments. Development of successful retail and marketing strategies is stressed. Typically offered Fall Spring.

CSR 34200 - Personal Finance

Credit Hours: 3.00. The class covers a comprehensive discussion of investments, consumer credit, insurance and retirement issues. The goal is to show how these components are interconnected in order to create a complete picture of financial health of an individual. Typically offered Spring Summer Fall. CTL:IPO 1811 Personal Finance

CSR 34400 - Fundamentals Of Negotiations

Credit Hours: 3.00. This course is designed to be relevant to the broad spectrum of bargaining "problems" that are traditionally faced by the manager, sales personnel and financial advisors. The course explores the processes of bargaining and negotiation as social and managerial activities. Special emphasis will be given to the areas of interpersonal and interpersonal and intergroup conflict, in addition to the interpersonal influence techniques and the tactics and strategies involved with improved bargaining and negotiation. The major purpose of the course is for each student to gain insight into his or her own negotiating style and to become a more effective negotiator, as well as a more astute observer of social process. The course will involve extensive use of cases, role-plays, and related participative activities, enhanced by rigorous self-review and introspection. Typically offered Fall Spring Summer.

CSR 40400 - Strategic Issues For Sales And Retailing

Credit Hours: 3.00. Analysis of selected retail organizations and their channel partners through in-depth discussion of contemporary paradigms in strategic marketing for both sales and retailing perspectives and their applications to management. Typically offered Fall Spring Summer.

CSR 41500 - Sales Force Management

Credit Hours: 3.00. An introduction to sales force management. An examination of the sales force management process, including principles of recruiting and selecting, training, compensation, motivation, supervision, and evaluation. Planning skills, including sales force deployment and the role of the sales force in sales forecasting, are also covered. Typically offered Fall Spring.

CSR 41800 - Selling And Sales Management Capstone

Credit Hours: 3.00. A capstone course in advanced professional selling taught in a seminar format and designed to prepare students for the transition from student to professional. Students are introduced to practitioner-focused issues involved in long-term, major B2B account sales and an emphasis is placed on professional presentation skills. Students will complete a senior group research project and a major account sales project. Professional dress code from business-casual to full-business attire required based on the scheduled day-to-day activity. Typically offered Fall Spring.

Required Courses in Other Departments (66-79 credits)

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CS 23500 - Introduction To Organizational Computing

Credit Hours: 3.00. People and organizations, decision-making, information systems, telecommunications, desktop systems, integration tools, collaboration and groupware, multimedia, authoring multimedia documents, emerging technologies. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

- COM - Select any 3 credit COM course numbered 10000-59999 except COM 11400 - Credit Hours: 3.00

COM 31800 - Principles Of Persuasion

Credit Hours: 3.00. Persuasion and its effects, ranging from individual influences to societal impacts. Various perspectives and models of persuasion are examined, including classical and modern approaches. Both theoretical and pragmatic considerations are introduced. Typically offered Fall Spring Summer.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

ECON 25200 - Macroeconomics

Credit Hours: 3.00. Introduction to macroeconomic theory. The course develops a theoretical framework permitting an analysis of the forces affecting national income, employment, interest rates, and the rate of inflation. Emphasis is placed upon the role of government fiscal and monetary policy in promoting economic growth and stable prices. Typically offered Fall Spring Summer. CTL:ISH 1041 Macroeconomics

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

ENGL 42000 - Business Writing

Credit Hours: 3.00. Workplace writing in networked environments for management contexts. Emphasizes organizational context, project planning, document management, ethics, research, team writing. Typical genres include management memos, reports, letters, e-mail, resumes (print and online), oral presentations. Typically offered Summer Fall Spring.

ENGL 42100 - Technical Writing

Credit Hours: 3.00. Workplace writing in networked environments for technical contexts. Emphasizes context and user analysis, data analysis/display, project planning, document management, usability, ethics, research, team writing. Typical genres include technical reports, memos, documentation, Web sites. Typically offered Fall Spring Summer.

SPAN 42400 - Business Spanish

Credit Hours: 3.00. A study of the terminology and techniques used in commercial transactions, including the interpretation and writing of business materials. Development of the four language skills, with emphasis on writing and speaking. Typically offered Fall Spring Summer.

HTM 14100 - Financial Accounting For The Service Industries

Credit Hours: 3.00. Fundamental accounting principles and procedures applied to the hospitality and service industries. Includes study of the uniform system of accounts, financial statements, special purpose journals, and subsidiary ledgers unique to the hospitality and service industries. Typically offered Summer Fall Spring.

MGMT 20000 - Introductory Accounting

Credit Hours: 3.00. The objectives of the course are to help students: (1) understand what is in financial statements and what the statements say about a business, (2) identify the business activities that caused the amounts that appear in the statements, and (3) understand how, when, and at what amount the effects of manager and employee actions will appear in the statements. Typically offered Fall Spring Summer. CTL:IPO 1801 Accounting I

HTM 24100 - Managerial Accounting And Financial Management In Hospitality Operations

Credit Hours: 3.00. Managerial and financial analyses of numerical data used for decision-making. Consideration of systems, techniques, information types, and presentational forms used by hospitality management. Emphasis on situations oriented to the hospitality industry. Typically offered Summer Fall Spring.

MGMT 20100 - Management Accounting I

Credit Hours: 3.00. An introduction to management's internal use of accounting information--for decision making, production management, product costing, motivating and evaluating performance, and budgeting. Typically offered Fall Spring Summer. CCN:IPO 1802 Accounting II

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

MGMT 32300 - Principles Of Marketing

Credit Hours: 3.00. This mixed lecture and case course provides an overview of the functional area of marketing. The course is taught from a managerial perspective; it focuses on inputs to the marketing decision-making process, the process itself, and its results. No credit for students in the School of Management, except economics majors. Typically offered Fall Spring.

MGMT 45500 - Legal Background For Business I

Credit Hours: 3.00. The nature and place of law in our society, national and international, social and moral bases of law enactment, regulation of business, legal liability, and enforcement procedures. Special emphasis on torts, contracts, and agency. No credit to students in the School of Management. Typically offered Fall Spring Summer.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

- OLS or COM Selective - select any 3 credit OLS or COM course numbered 10000-59999 - Credit Hours: 3.00

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

STAT 22500 - Introduction To Probability Models

Credit Hours: 3.00. An introduction to basic probability. Emphasis is placed on formulation of models and applications. Probability calculus, standard distributions, random variables, and moments. Credit cannot be given for more than one of STAT 22500, STAT 31100, or STAT 41600. Typically offered Summer Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

IT 34200 - Introduction To Statistical Quality

Credit Hours: 3.00. Basic concepts of quality systems in business and manufacturing settings are presented. Basic statistical methods as applied to quality control, and an introduction to sampling plans are included. Field trips may be required. Typically offered Fall Spring Summer.

(If STAT 11300 *selected*, fulfills Science, Technology, & Society Core)

- [Humanities Core] - select from University list - Credit Hours: 3.00
- [Science Core] - select from University list - Credit Hours: 3.00
- [Science Core] - select from University list - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list (IF STAT 11300 is selected for other requirements, this requirement is fulfilled) - Credit Hours: 0.00 - 3.00

Select a Minor (Purdue West Lafayette campus) or Entrepreneurship Certificate (6-15 credits)

Electives (3-18 credits)

120 semester credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

CSR 10000 - Introduction To CSR

Credit Hours: 1.00. A workshop to familiarize students with the CSR department, department majors, advising resources, and major requirements. Special emphasis on basic freshman survival skills. Typically offered Fall.

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CS 23500 - Introduction To Organizational Computing

Credit Hours: 3.00. People and organizations, decision-making, information systems, telecommunications, desktop systems, integration tools, collaboration and groupware, multimedia, authoring multimedia documents, emerging technologies. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

CSR 28200 - Customer Relations Management

Credit Hours: 3.00. A course that provides insight into the structure and working of customer relations management and its role in business and government agency. Analysis of how consumer needs, complaints, and education are handled. Customer relations' management in the real world and techniques used in managing customer relations toward the goal of maximizing customer satisfaction. This course has a real world focus and is more applied than the usual introductory course. Typically offered Fall Spring.

16-17 Credits

Spring 1st Year

- SCIENCE 1 of 2 ⁽¹⁾ (UCC) - Credit Hours: 2.00 - 4.00
- MINOR/CERT ⁽⁵⁾ - Credit Hours: 3.00

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or

senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

15 Credits

Fall 2nd Year

AGEC 33100 - Principles Of Selling In Agricultural Business

Credit Hours: 3.00. The principles of salesmanship and their application to the agricultural business. Topics include attitudes and value systems, basic behavioral patterns, the purchase decision process, relationship of sales to marketing, selling strategies, preparing for sales calls, making sales presentations, handling objections, and closing sales. Emphasis is placed on application of principles to real-world situations and on building selling skills through class projects. Requires class trips. Students will pay individual lodging or meal expenses when necessary. Typically offered Fall Spring.

- SCIENCE 2 of 2 (1) ♦ (UCC) - Credit Hours: 3.00

HTM 14100 - Financial Accounting For The Service Industries

Credit Hours: 3.00. Fundamental accounting principles and procedures applied to the hospitality and service industries. Includes study of the uniform system of accounts, financial statements, special purpose journals, and subsidiary ledgers unique to the hospitality and service industries. Typically offered Summer Fall Spring.

MGMT 20000 - Introductory Accounting

Credit Hours: 3.00. The objectives of the course are to help students: (1) understand what is in financial statements and what the statements say about a business, (2) identify the business activities that caused the amounts that appear in the statements, and (3) understand how, when, and at what amount the effects of manager and employee actions will appear in the statements. Typically offered Fall Spring Summer. CTL:IPO 1801 Accounting I

CSR 20000 - Professional Development In Consumer Science

Credit Hours: 1.00. Professional Development in Consumer Sciences & Retailing is a required course that will provide the necessary techniques to manage job search skills and career development for both current and future professional needs. The covered topics will expose students to on-campus resources, opportunities to gain key networking skills, and establish their professional identity to better prepare students for the current job market. Typically offered Fall Spring.

- MINOR/CERT ₍₅₎ - Credit Hours: 3.00
- Free Elective - Credit Hours: 3.00

16 Credits

Spring 2nd Year

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

HTM 24100 - Managerial Accounting And Financial Management In Hospitality Operations

Credit Hours: 3.00. Managerial and financial analyses of numerical data used for decision-making. Consideration of systems, techniques, information types, and presentational forms used by hospitality management. Emphasis on situations oriented to the hospitality industry. Typically offered Summer Fall Spring.

MGMT 20100 - Management Accounting I

Credit Hours: 3.00. An introduction to management's internal use of accounting information--for decision making, production management, product costing, motivating and evaluating performance, and budgeting. Typically offered Fall Spring Summer. CCN:IPO 1802 Accounting II

COM 31800 - Principles Of Persuasion

Credit Hours: 3.00. Persuasion and its effects, ranging from individual influences to societal impacts. Various perspectives and models of persuasion are examined, including classical and modern approaches. Both theoretical and pragmatic considerations are introduced. Typically offered Fall Spring Summer.

- MINOR/CERT ₍₅₎ - Credit Hours: 3.00

15 Credits

Fall 3rd Year

CSR 31500 - Relationship Selling

Credit Hours: 3.00. This course focuses on long term relationship selling. The course is organized around a seven step selling process which has proven to be effective. The course adds to this process some principles of marketing and business strategy. The elements are necessary for the success of professional salesperson both in successful prospecting and making strategic choices as to how to allocate their time within the territory. Important to the learning process is actually practice of principles. Students will do various exercises of principles such as prospecting and negotiation. At the end of the semester, students will hone the skills learned through the semester with a series of roll plays designed to put them in position of both seller and buyer. Typically offered Fall Spring Summer.

MGMT 32300 - Principles Of Marketing

Credit Hours: 3.00. This mixed lecture and case course provides an overview of the functional area of marketing. The course is taught from a managerial perspective; it focuses on inputs to the marketing decision-making process, the process itself, and its results. No credit for students in the School of Management, except economics majors. Typically offered Fall Spring.

CSR 33100 - Consumer Behavior

Credit Hours: 3.00. An interdisciplinary survey of consumer behavior theory focused on psychological, sociological, and cultural influences on consumer choice and use of products and services. Credit will not be given for both CSR 33100 and PSY 28500. Typically offered Fall Spring.

MGMT 45500 - Legal Background For Business I

Credit Hours: 3.00. The nature and place of law in our society, national and international, social and moral bases of law enactment, regulation of business, legal liability, and enforcement procedures. Special emphasis on torts, contracts, and agency. No credit to students in the School of Management. Typically offered Fall Spring Summer.

- COM Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

CSR 30900 - Leadership Strategies

Credit Hours: 3.00. Provides knowledge of humanistic processes that contribute to development of effective leadership. Typically offered Spring.

CSR 41500 - Sales Force Management

Credit Hours: 3.00. An introduction to sales force management. An examination of the sales force management process, including principles of recruiting and selecting, training, compensation, motivation, supervision, and evaluation. Planning skills, including sales force deployment and the role of the sales force in sales forecasting, are also covered. Typically offered Fall Spring.

CSR 33200 - Cross-Cultural Marketing And International Retailing

Credit Hours: 3.00. Examination of marketing/retail practices used to target domestic and global consumer market segments. Development of successful retail and marketing strategies is stressed. Typically offered Fall Spring.

- COM or OLS Elective - Credit Hours: 3.00
- MINOR/CERT ⁽⁵⁾ - Credit Hours: 3.00

15 Credits

Summer 3rd Year

CSR 30700 - Field Experience In Selling And Sales Management

Credit Hours: 1.00. Approved in-service training and supervised work experience in selling and sales management. Total of 140 hours required with in-depth report and analysis of activities. Permission of department required. Typically offered Fall Spring Summer.

- Field Experience - Credit Hour: 1.00
 - Students may opt for the Study Abroad Internship Program in Dublin, London, or Sydney (6 credits) or complete the Interns for Indiana Internship (3 credits) to fulfil this requirement.

1 Credits

Fall 4th Year

CSR 34400 - Fundamentals Of Negotiations

Credit Hours: 3.00. This course is designed to be relevant to the broad spectrum of bargaining "problems" that are traditionally faced by the manager, sales personnel and financial advisors. The course explores the processes of bargaining and negotiation as social and managerial activities. Special emphasis will be given to the areas of interpersonal and interpersonal and intergroup conflict, in addition to the interpersonal influence techniques and the tactics and strategies involved with improved bargaining and negotiation. The major purpose of the course is for each student to gain insight into his or her own negotiating style and to become a more effective negotiator, as well as a more astute observer of social process. The course will involve extensive use of cases, role-plays, and related participative activities, enhanced by rigorous self-review and introspection. Typically offered Fall Spring Summer.

CSR 40400 - Strategic Issues For Sales And Retailing

Credit Hours: 3.00. Analysis of selected retail organizations and their channel partners through in-depth discussion of contemporary paradigms in strategic marketing for both sales and retailing perspectives and their applications to management. Typically offered Fall Spring Summer.

CSR 34200 - Personal Finance

Credit Hours: 3.00. The class covers a comprehensive discussion of investments, consumer credit, insurance and retirement issues. The goal is to show how these components are interconnected in order to create a complete picture of financial health of an individual. Typically offered Spring Summer Fall. CTL:IPO 1811 Personal Finance

- HUMANITIES (2) (UCC) - Credit Hours: 3.00

CSR 41800 - Selling And Sales Management Capstone

Credit Hours: 3.00. A capstone course in advanced professional selling taught in a seminar format and designed to prepare students for the transition from student to professional. Students are introduced to practitioner-focused issues involved in long-term, major B2B account sales and an emphasis is placed on professional presentation skills. Students will complete a senior

group research project and a major account sales project. Professional dress code from business-casual to full-business attire required based on the scheduled day-to-day activity. Typically offered Fall Spring.

15 Credits

Spring 4th Year

- Free Elective or Sci Tech Soc ₍₃₎ - Credit Hours: 3.00

ENGL 42000 - Business Writing

Credit Hours: 3.00. Workplace writing in networked environments for management contexts. Emphasizes organizational context, project planning, document management, ethics, research, team writing. Typical genres include management memos, reports, letters, e-mail, resumes (print and online), oral presentations. Typically offered Summer Fall Spring.

ENGL 42100 - Technical Writing

Credit Hours: 3.00. Workplace writing in networked environments for technical contexts. Emphasizes context and user analysis, data analysis/display, project planning, document management, usability, ethics, research, team writing. Typical genres include technical reports, memos, documentation, Web sites. Typically offered Fall Spring Summer.

- FREE ELECTIVE - Credit Hours: 3.00
- FREE ELECTIVE - Credit Hours: 3.00

12 Credits

Note

- (1) **Science Options:** Two courses selected from the University Core Curriculum science options (4 - 8 hours).
- (2) **Humanities:** 3 hours selected from the University Core Curriculum humanities options.
- (3) STAT 11300 meets the Science, Technology & Society University Core competency. Student may choose STAT 22500, STAT 30100, or IT 34200 to fulfill the Statistics requirement but will then need to select one additional Science, Technology & Society course from the University Core Curriculum.
- (4) **Approved Study Abroad** Experience is an option.
- (5) Complete a MINOR or CERTIFICATE to meet degree requirements.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Department of Health and Kinesiology

Health & Kinesiology Overview

Purdue University's Department of Health and Kinesiology (HK) confronts issues related to health through research, student learning and community engagement that focuses on human movement, sports performance and management, exercise and fitness, public health, and disease prevention. Utilizing a multidiscipline, team approach, Health and Kinesiology is a leader in faculty-led, student-centered research.

We are shaping the future by preparing the next generation - HK students - to help others develop and sustain a healthy and active lifestyle. From physical activity and health professionals to researchers and policymakers, HK graduates are tackling global health concerns across the lifespan. We invite you to explore our website to learn more about HK's majors, hands-on learning facilities and outstanding faculty.

Faculty

<http://www.purdue.edu/hhs/hk/directory/faculty/index.php>

Contact Information

Department of Health and Kinesiology
Purdue University
Lambert Fieldhouse
800 West Stadium Avenue
West Lafayette, IN 47907-2046
Phone: (765) 49-43170
Fax: (765) 49-61239

Graduate Information

For Graduate Information please see Health and Kinesiology Graduate Program Information.

Applied Exercise and Health, BS

About the Program

The Applied Exercise & Health major is a comprehensive and structured curriculum that supplies students with the knowledge and practical experience to become leading professionals in the field of health and fitness. It is a cooperative educational program housed in the Department of Health & Kinesiology with support from the Division of Recreational Sports and surrounding community organizations dedicated to promoting health and physical activity in all populations including children, adults, and seniors. The goals of the program are to prepare students as entry-level exercise specialists and to prepare students to sit for and pass either the American College of Sports Medicine Certified Exercise Physiologist Exam or the National Strength and Conditioning Association Certified Strength and Conditioning Specialist Exam®. Some Applied Exercise & Health students choose to pursue graduate or professional school (physical therapy (PT), occupational therapy (OT), etc.).

Note: Applied Exercise & Health is a selective program. Students begin in Pre-Applied Exercise & Health in the fall semester and apply to the program during the spring semester. Admittance to the Applied Exercise & Health Program is required to continue in the Applied Exercise & Health major. For additional information see: www.purdue.edu/hhs/hk/undergraduate/.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Applied Exercise and Health include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HK-BS
APEX
120 Credits

Note: Applied Exercise & Health is a selective program. Students begin in Pre-Applied Exercise & Health in the fall semester and apply to the program during the spring semester. Admittance to the Applied Exercise & Health Program is required to continue in the Applied Exercise & Health major. For additional information see: www.purdue.edu/hhs/hk/undergraduate/majors/

Major Requirements (52 credits)

Students must earn a "C-" or better in all HK courses.

HK 10000 - Foundations Of Kinesiology

Credit Hours: 3.00. This course will provide an introduction to the physical and behavioral sciences underlying kinesiology, the study of human movement. The course will cover foundational concepts in exercise physiology, biomechanics, motor behavior, sport and exercise psychology, and sociology and history of physical activity. The course will take an interdisciplinary perspective, exploring both key concepts in each of these sub-areas of kinesiology, and how they are integrated to understand problems in human movement, exercise, physical activity, sport, and healthy lifestyles. Typically offered Fall Spring Summer.

HK 13500 - Introduction To Health And Kinesiology

Credit Hours: 1.00. Overviews the disciplines of health and kinesiology. Students explore skills and academic interests in these areas. Describes career opportunities and options for graduate study. Provides strategies for professional and portfolio development. Students complete five hours of community service per semester. Typically offered Fall Spring.

HK 21500 - Basic Public Health Studies

Credit Hours: 3.00. Examination of basic scientific concepts as applied to the problems and issues in selected areas of human health behavior with particular attention to their influence on population and individual health. Restricted to students enrolled in major degree programs for which this course is a requirement. Typically offered Fall Spring.

HK 22100 - Introduction To Methods Of Small And Large Group Exercise Instruction

Credit Hours: 2.00. Designed to teach the emerging Exercise and Health professional effective hands-on methodology for use in small and large group physical activity sessions. Students will be able to: identify the role of a personal trainer and group fitness coach; create and lead effective training programs or teaching progressions; and choreograph exercise programs with and without music. Students will examine the psychological effects of music to exercise adherence. Designed to prepare students for future clinical practice and certification. Typically offered Fall Spring Summer.

HK 26100 - Applied Anatomy And Kinesiology

Credit Hours: 3.00. The study of how muscles, bones, and joint structure produce human motion. Kinesiological analysis of full body, upper and lower extremity skills. Typically offered Spring.

HK 26400 - Principles Of Motor Learning, Development, And Biomechanics

Credit Hours: 3.00. This course surveys the fundamental processes and variables related to motor development, motor learning, and biomechanics. Students will be exposed to concepts relevant to teaching motor skills and critical issues to increase knowledge of human movement. Typically offered Fall Spring Summer.

HK 26900 - Career Development And Preparation For The Health And Fitness Fields

Credit Hours: 1.00. Provides students with basic professional skills and materials for subsequent practicum experience and future employment search. Students will have secured a viable practicum site, complete with written job description/responsibilities, at the completion of the course. Typically offered Fall Spring.

HK 30200 - Applied Clinical Anatomy

Credit Hours: 3.00. An introduction to the regional anatomical study of the human body for undergraduate allied health students. Lectures will be supplemented by observation and demonstration of prosected cadaver material, radiographs, osteology, and surface anatomy. Typically offered Fall.

HK 31500 - Group Fitness Leadership

Credit Hours: 2.00. This course is designed to provide students with an overview of the educational concepts, program design, and instruction/leadership skills needed to design and teach instructor-led exercise programs for small (2-3 individuals) and large

(10+) groups with and without music. The course will include basic analysis and application of safe and effective exercise procedures for all fitness levels. Students will be expected to lead group classes throughout the semester as assigned by the course instructor. Preparedness and ability to execute will be assessed. This course is designed to help students prepare for future clinical practice and certification as an ACSM Certified Clinical Exercise Physiologist. Typically offered Fall Spring Summer.

HK 31600 - Foundations Of Strength And Conditioning

Credit Hours: 2.00. This course will provide students with an in depth analysis of strength and conditioning principles, and application strategies to cardiorespiratory conditioning, strength training, and flexible exercise. Students will assess the foundational application of anatomy, physiology, and biomechanics to various forms of exercise training based on standards of the American College of Sports Medicine, National Strength and Conditioning Association, and the National Academy of Sports Medicine. A major focus of this class will also prepare students to instruct and coach on an individual level to ensure proper mechanics, engagement, and execution of exercise movement. This course is designed to help students prepare for future clinical practice and certification as an ACSM Certified Clinical Exercise Physiologist. Typically offered Fall Spring Summer.

HK 36600 - Health Behavior And Health Promotion

Credit Hours: 3.00. Introduces health behavior theory and practice in the context of health promotion and education. Examines individual, interpersonal, and community approaches to explaining and predicting health behavior and emphasizes their application to interventions in health promotion and education. Typically offered Fall Spring Summer.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

HK 37200 - Sport And Exercise Psychology I

Credit Hours: 3.00. This course focuses on social and psychological factors related to participation in sport, exercise, and physical activity. The class explores both (a) how social and psychological factors influence participation and performance in physical activity, and (b) how sport, exercise, and physical activity participation affects psychological well-being. Topics include personality, socialization, learning and feedback, stress and coping, self-perceptions, motivation, and psychological methods for enhancing personal development and physical performance. Typically offered Fall Spring Summer.

HK 38500 - Methods Of Health Promotion And Education

Credit Hours: 3.00. Methods and materials of health promotion and education; preparation and use of content and materials related to health concerns of target populations. A variety of strategies and media are covered with theoretical and practical applications. Typically offered Fall Spring.

HK 41100 - Clinical Applications Of Health/Fitness Concepts III

Credit Hours: 1.00. Under the supervision of the program coordinator, students will demonstrate the ability to apply specific skills, competencies, and applications of basic/advanced exercise principles in a professional setting. Required to be taken fall and spring. Permission of department required. Typically offered Fall Spring.

HK 42100 - Health Screening And Fitness Evaluation And Design

Credit Hours: 3.00. Health screening, fitness assessment and evaluation, and exercise prescription will be the primary focus of this course. The course will also qualify students to take the American College of Sports Medicine Health/Fitness Instructor exam. Typically offered Fall Spring.

HK 42200 - Basic Concepts In Exercise Program Design

Credit Hours: 3.00. Introduces basic program design concepts and rationale to design fitness programs for healthy adults emphasizing cardiovascular training, strength training, flexibility training, and balance. Typically offered Fall Spring.

HK 42400 - Health And Fitness Program Management

Credit Hours: 3.00. Overviews major principles, competencies, and challenges involved in managing health, fitness, and sports organizations. Students will develop an understanding of the key considerations and skills needed to organize and manage human resources and facilities in health, fitness, and sport settings. Typically offered Fall Spring.

HK 46800 - Advanced Exercise Physiology II

Credit Hours: 3.00. An advanced undergraduate course in the area of exercise and human performance. Further examination of the physiological mechanisms and theories involved in the exercise response. Typically offered Fall Spring.

HK 46900 - Exercise Testing And Prescription In Special Populations

Credit Hours: 3.00. Examines responses to exercise testing and prescription in healthy adults compared to exercise responses and special considerations for individuals with chronic diseases and conditions and issues of concern to pregnant women, children, and older adults, among others. Typically offered Fall Spring.

HK 49200 - Professional Work Experience IV

Credit Hours: 1.00. Practical experience in professional employment. Programs must be preplanned and conducted under

direction of the departmental coordinator and agency supervisor. Students will submit documentation of practical experiences. Permission of instructor required. Typically offered Fall Spring Summer.

Required Courses in Other Departments (15 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

MA 15300 - Algebra And Trigonometry I

Credit Hours: 3.00. Exponents and radicals; algebraic and fractional expressions. Equations and inequalities, systems of linear equations. Polynomial, exponential, and logarithmic functions. Not open to students with credit in MA 15900. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring Summer. CTL:IMA 1601 College Algebra

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- 10100 Other Language - Credit Hours: 3.00 [Fulfills Humanities Core]
- 10200 Other Language - Credit Hours: 3.00 (Total of 6 credits - must be from one language)
- [Science, Technology & Society Core] - select from University list (STAT 11300, if selected for STAT requirement, fulfills this requirement) - Credit Hours: 0.00 - 3.00

Electives (29-33 credits)

Note

At least 32 credits of Purdue coursework required at 30000 level or higher. APEX includes 39 credits (if taken at Purdue).

120 semester credits required for Bachelor of Science degree.

Students completing this major will be eligible to take the ACSM Certified Exercise Physiologist Exam or NSCA Certified Strength and Conditioning Specialist Exam.

Other Languages - 6 credits from one language

American Sign Language, Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Pre-Applied Exercise & Health

<http://www.purdue.edu/hhs/hk/undergraduate/majors/>

Program Requirements

Fall 1st Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative

and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 15300 - Algebra And Trigonometry I

Credit Hours: 3.00. Exponents and radicals; algebraic and fractional expressions. Equations and inequalities, systems of linear equations. Polynomial, exponential, and logarithmic functions. Not open to students with credit in MA 15900. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring Summer. CTL:IMA 1601 College Algebra

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- Other Language 10100 - Credit Hours: 3.00 *

16 Credits

Spring 1st Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HK 10000 - Foundations Of Kinesiology

Credit Hours: 3.00. This course will provide an introduction to the physical and behavioral sciences underlying kinesiology, the study of human movement. The course will cover foundational concepts in exercise physiology, biomechanics, motor behavior, sport and exercise psychology, and sociology and history of physical activity. The course will take an interdisciplinary perspective, exploring both key concepts in each of these sub-areas of kinesiology, and how they are integrated to understand problems in human movement, exercise, physical activity, sport, and healthy lifestyles. Typically offered Fall Spring Summer.

HK 13500 - Introduction To Health And Kinesiology

Credit Hours: 1.00. Overviews the disciplines of health and kinesiology. Students explore skills and academic interests in these areas. Describes career opportunities and options for graduate study. Provides strategies for professional and portfolio development. Students complete five hours of community service per semester. Typically offered Fall Spring.

- Other Language 10200 - Credit Hours: 3.00

14-15 Credits

Admittance to Applied Exercise & Health Program Required to Continue

Applied Exercise & Health

Program Requirements

Fall 2nd Year

HK 21500 - Basic Public Health Studies

Credit Hours: 3.00. Examination of basic scientific concepts as applied to the problems and issues in selected areas of human health behavior with particular attention to their influence on population and individual health. Restricted to students enrolled in major degree programs for which this course is a requirement. Typically offered Fall Spring.

HK 22100 - Introduction To Methods Of Small And Large Group Exercise Instruction

Credit Hours: 2.00. Designed to teach the emerging Exercise and Health professional effective hands-on methodology for use in small and large group physical activity sessions. Students will be able to: identify the role of a personal trainer and group fitness

coach; create and lead effective training programs or teaching progressions; and choreograph exercise programs with and without music. Students will examine the psychological effects of music to exercise adherence. Designed to prepare students for future clinical practice and certification. Typically offered Fall Spring Summer.

HK 26100 - Applied Anatomy And Kinesiology

Credit Hours: 3.00. The study of how muscles, bones, and joint structure produce human motion. Kinesiological analysis of full body, upper and lower extremity skills. Typically offered Spring.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- Elective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood

and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HK 26400 - Principles Of Motor Learning, Development, And Biomechanics

Credit Hours: 3.00. This course surveys the fundamental processes and variables related to motor development, motor learning, and biomechanics. Students will be exposed to concepts relevant to teaching motor skills and critical issues to increase knowledge of human movement. Typically offered Fall Spring Summer.

HK 31500 - Group Fitness Leadership

Credit Hours: 2.00. This course is designed to provide students with an overview of the educational concepts, program design, and instruction/leadership skills needed to design and teach instructor-led exercise programs for small (2-3 individuals) and large (10+) groups with and without music. The course will include basic analysis and application of safe and effective exercise procedures for all fitness levels. Students will be expected to lead group classes throughout the semester as assigned by the course instructor. Preparedness and ability to execute will be assessed. This course is designed to help students prepare of future clinical practice and certification as an ACSM Certified Clinical Exercise Physiologist. Typically offered Fall Spring Summer.

HK 42100 - Health Screening And Fitness Evaluation And Design

Credit Hours: 3.00. Health screening, fitness assessment and evaluation, and exercise prescription will be the primary focus of this course. The course will also qualify students to take the American College of Sports Medicine Health/Fitness Instructor exam. Typically offered Fall Spring.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00

15 Credits

Personal Trainer certification required before HK 31600

Fall 3rd Year

HK 30200 - Applied Clinical Anatomy

Credit Hours: 3.00. An introduction to the regional anatomical study of the human body for undergraduate allied health students. Lectures will be supplemented by observation and demonstration of prosected cadaver material, radiographs, osteology, and surface anatomy. Typically offered Fall.

HK 31600 - Foundations Of Strength And Conditioning

Credit Hours: 2.00. This course will provide students with an in depth analysis of strength and conditioning principles, and application strategies to cardiorespiratory conditioning, strength training, and flexible exercise. Students will assess the foundational application of anatomy, physiology, and biomechanics to various forms of exercise training based on standards of the American College of Sports Medicine, National Strength and Conditioning Association, and the National Academy of Sports Medicine. A major focus of this class will also prepare students to instruct and coach on an individual level to ensure proper mechanics, engagement, and execution of exercise movement. This course is designed to help students prepare for future clinical practice and certification as an ACSM Certified Clinical Exercise Physiologist. Typically offered Fall Spring Summer.

HK 36600 - Health Behavior And Health Promotion

Credit Hours: 3.00. Introduces health behavior theory and practice in the context of health promotion and education. Examines individual, interpersonal, and community approaches to explaining and predicting health behavior and emphasizes their application to interventions in health promotion and education. Typically offered Fall Spring Summer.

HK 42200 - Basic Concepts In Exercise Program Design

Credit Hours: 3.00. Introduces basic program design concepts and rationale to design fitness programs for healthy adults emphasizing cardiovascular training, strength training, flexibility training, and balance. Typically offered Fall Spring.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 0.00 - 1.00

14-15 Credits

Spring 3rd Year

HK 26900 - Career Development And Preparation For The Health And Fitness Fields

Credit Hours: 1.00. Provides students with basic professional skills and materials for subsequent practicum experience and future employment search. Students will have secured a viable practicum site, complete with written job description/responsibilities, at the completion of the course. Typically offered Fall Spring.

HK 42400 - Health And Fitness Program Management

Credit Hours: 3.00. Overviews major principles, competencies, and challenges involved in managing health, fitness, and sports organizations. Students will develop an understanding of the key considerations and skills needed to organize and manage human resources and facilities in health, fitness, and sport settings. Typically offered Fall Spring.

HK 46800 - Advanced Exercise Physiology II

Credit Hours: 3.00. An advanced undergraduate course in the area of exercise and human performance. Further examination of the physiological mechanisms and theories involved in the exercise response. Typically offered Fall Spring.

HK 46900 - Exercise Testing And Prescription In Special Populations

Credit Hours: 3.00. Examines responses to exercise testing and prescription in healthy adults compared to exercise responses and special considerations for individuals with chronic diseases and conditions and issues of concern to pregnant women, children, and older adults, among others. Typically offered Fall Spring.

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

- Elective - Credit Hours: 3.00

16 Credits

Fall 4th Year

HK 37200 - Sport And Exercise Psychology I

Credit Hours: 3.00. This course focuses on social and psychological factors related to participation in sport, exercise, and physical activity. The class explores both (a) how social and psychological factors influence participation and performance in physical activity, and (b) how sport, exercise, and physical activity participation affects psychological well-being. Topics include personality, socialization, learning and feedback, stress and coping, self-perceptions, motivation, and psychological methods for enhancing personal development and physical performance. Typically offered Fall Spring Summer.

HK 38500 - Methods Of Health Promotion And Education

Credit Hours: 3.00. Methods and materials of health promotion and education; preparation and use of content and materials related to health concerns of target populations. A variety of strategies and media are covered with theoretical and practical applications. Typically offered Fall Spring.

HK 41100 - Clinical Applications Of Health/Fitness Concepts III

Credit Hours: 1.00. Under the supervision of the program coordinator, students will demonstrate the ability to apply specific skills, competencies, and applications of basic/advanced exercise principles in a professional setting. Required to be taken fall and spring. Permission of department required. Typically offered Fall Spring.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 4th Year

- Science, Technology, & Society* or Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

HK 49200 - Professional Work Experience IV

Credit Hours: 1.00. Practical experience in professional employment. Programs must be preplanned and conducted under direction of the departmental coordinator and agency supervisor. Students will submit documentaton of practical experiences. Permission of instructor required. Typically offered Fall Spring Summer.

13 Credits

Note: Students may also do internship during the summer and graduate in August.

Note

* Satisfies a University Foundational Learning Outcome

Students must earn a "C-" or higher in all required HK courses.

120 semester credits required for Bachelor of Science degree.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Athletic Training, BS

About the Program

The undergraduate Athletic Training education program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The goals of the program are to prepare students as entry-level athletic trainers through an extensive curriculum of didactic and clinical experiences and to prepare students to sit for and pass the Board of Certification (BOC) exam. Some Athletic Training students choose to pursue graduate or professional school (physical therapy (PT), occupational therapy (OT), physician's assistant (PA), etc.). The program consists of academic coursework offered by the Department of Health & Kinesiology and clinical education experiences with the Division of Intercollegiate Athletics (ICA), the Division of Recreational Sports (RSC), and the Purdue University Student Health Center (PUSH), as well as several off-campus sites. Purdue is a member of the Big Ten Conference and offers 9 men's and 9 women's sports at the NCAA Division 1 level.

*Note: Athletic Training is a selective program. Students begin in Pre-Athletic Training in the fall semester and apply to the professional program during the spring semester. **Admittance to the Athletic Training Professional Program is required to continue in the Athletic Training major.** For additional information see: <http://www.purdue.edu/hhs/hk/undergraduate/majors/>.*

Degree Requirements and Supplemental InformationS

The full Program Requirements for 2016-17 Athletic Training include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

ATEP-BS
ATHL
120 Credits

Note: Athletic Training is a selective program. Students begin in Pre-Athletic Training in the fall semester and apply to the professional program during the spring semester. Admittance to the Athletic Training Professional Program is required to continue in the Athletic Training major. For additional information see: www.purdue.edu/hhs/hk/undergraduate/majors/

Major Requirements (54 credits)

Students must earn a "C-" or better in all HK courses.

Must complete 12 credits in clinical practice (HK 20100, HK 30100, HK 40100) once accepted into the professional program.

HK 10100 - Clinical Practice in Athletic Training - Orientation

Credit Hours: 1.00. Under supervision of the certified athletic trainer, students will undertake observation of training room operations and duties of the athletic trainer. Acquisition of basic skills and knowledge is expected. Typically offered Spring Fall.

- HK 10100 - Clinical Practice in Athletic Training - Orientation

HK 13500 - Introduction To Health And Kinesiology

Credit Hours: 1.00. Overviews the disciplines of health and kinesiology. Students explore skills and academic interests in these areas. Describes career opportunities and options for graduate study. Provides strategies for professional and portfolio development. Students complete five hours of community service per semester. Typically offered Fall Spring.

HK 20100 - Clinical Practice In Athletic Training - Assist

Credit Hours: 2.00. Under supervision of the certified athletic trainer, students will be provided the opportunity to practice those skills required of the athletic trainer. The student will assist the staff and upperclass students. Typically offered Fall Spring.

- HK 20100 - Clinical Practice In Athletic Training - Assist

HK 20800 - Prevention And Treatment Of Athletic Injuries

Credit Hours: 3.00. Provides the physical educator, coach, and athletic training student with an introduction to the prevention, recognition, and treatment of common athletic injuries, and response to common emergency situations. American Red Cross Community First Aid and CPR certification is included. PE teaching majors and minors, athletic training majors, and coaching endorsement students only. Typically offered Fall Spring.

HK 21500 - Basic Public Health Studies

Credit Hours: 3.00. Examination of basic scientific concepts as applied to the problems and issues in selected areas of human health behavior with particular attention to their influence on population and individual health. Restricted to students enrolled in major degree programs for which this course is a requirement. Typically offered Fall Spring.

HK 26100 - Applied Anatomy And Kinesiology

Credit Hours: 3.00. The study of how muscles, bones, and joint structure produce human motion. Kinesiological analysis of full body, upper and lower extremity skills. Typically offered Spring.

HK 30100 - Clinical Practice In Athletic Training - Associate

Credit Hours: 2.00. Under the supervision of a certified athletic trainer, students will be provided the opportunity to practice those skills required of an athletic trainer. Independent practice as an athletic trainer. Typically offered Fall Spring.

- HK 30100 - Clinical Practice In Athletic Training - Associate

HK 30200 - Applied Clinical Anatomy

Credit Hours: 3.00. An introduction to the regional anatomical study of the human body for undergraduate allied health students. Lectures will be supplemented by observation and demonstration of prosected cadaver material, radiographs, osteology, and surface anatomy. Typically offered Fall.

HK 30300 - Athletic Training Modalities

Credit Hours: 3.00. Theory and practice in the use of physical agents used in the management and promotion of healing of athletic injuries. Typically offered Spring.

HK 30400 - Therapeutic Exercise

Credit Hours: 3.00. This course will introduce the athletic training student to the planning and implementation of a comprehensive reconditioning program for injuries sustained by athletes. Techniques of therapeutic exercise as they apply to athletic training will be examined. Typically offered Spring.

HK 30500 - Injury Assessment I

Credit Hours: 3.00. A guided lecture and demonstration experience designed to expose the student to the techniques normally required of an athletic trainer. Topics include splinting and transportation, equipment fitting and fabrication, lower extremity injury evaluation, taping and bracing. Typically offered Fall.

HK 30600 - Injury Assessment II

Credit Hours: 3.00. A continuation of HK 30500. A guided lecture and demonstration experience designed to expose the student to the techniques of the upper extremity, head, neck, abdomen, and thorax, along with associated taping, padding, and bracing. Typically offered Spring.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

HK 37200 - Sport And Exercise Psychology I

Credit Hours: 3.00. This course focuses on social and psychological factors related to participation in sport, exercise, and physical activity. The class explores both (a) how social and psychological factors influence participation and performance in physical activity, and (b) how sport, exercise, and physical activity participation affects psychological well-being. Topics include

personality, socialization, learning and feedback, stress and coping, self-perceptions, motivation, and psychological methods for enhancing personal development and physical performance. Typically offered Fall Spring Summer.

HK 40100 - Clinical Practice In Athletic Training - Lead

Credit Hours: 2.00. Under the supervision of the certified athletic trainer, the student will be provided the opportunity to practice those skills acquired. The student is expected to take a leadership role in the clinical setting. Typically offered Fall Spring.

- HK 40100 - Clinical Practice In Athletic Training - Lead

HK 40200 - Pathophysiology For Allied Health Professions

Credit Hours: 3.00. Overview of the etiology, pathogenesis, and clinical features of common illnesses and diseases that affect the human body's various organ systems. Emphasis is placed on cellular adaptation to disease and tissue response to damage. Typically offered Spring.

HK 40500 - Administration Of Athletic Training Programs

Credit Hours: 3.00. Advanced theory in the more complex injuries associated with athletics. Organization of athletic training programs, nontraumatic medical problems, pharmacology, and athletic nutrition also will be studied. Typically offered Spring.

HK 40900 - Seminar In Sports Medicine

Credit Hours: 3.00. A review of selected medical aspects of sports. Liberal use of guest medical professionals. A broad look at the field of sports medicine. Typically offered Spring.

Required Courses in Other Departments (38-44 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

- Chemistry Course - CHM - Credit Hours: 3.00 - 4.00

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 15800 - Precalculus- Functions And Trigonometry

Credit Hours: 3.00. Functions, Trigonometry, and Algebra of calculus topics designed to fully prepare students for all first semester calculus courses. Functions topics include Quadratic, Higher Order Polynomials, Rational, Exponential, Logarithmic, and Trigonometric. Other focuses include graphing of functions and solving application problems. Not Available for credit toward graduation in the College of Science. Students may not receive credit for both MA 15400 and MA 15800. Students may not receive credit for both MA 15900 and MA 15800. Typically offered Fall Spring Summer.

MA 15300 - Algebra And Trigonometry I

Credit Hours: 3.00. Exponents and radicals; algebraic and fractional expressions. Equations and inequalities, systems of linear equations. Polynomial, exponential, and logarithmic functions. Not open to students with credit in MA 15900. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring Summer. CTL:IMA 1601 College Algebra

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

- Physics Course - PHYS - Credit Hours: 3.00 - 4.00

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality,

intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- 10100 Other Language - Credit Hours: 3.00 [Fulfills Humanities Core]
- 10200 Other Language - Credit Hours: 3.00 (Total of 6 credits - must be from one language)
- [Oral Communication Core] - select COM course from University list - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list (STAT 11300, if selected for STAT requirement, fulfills this requirement) - Credit Hours: 0.00 - 3.00

Electives (22-28 credits)

Note

At least 32 credits of Purdue coursework required at 30000 level or higher. *ATHL includes 41 credits (if taken at Purdue).*

120 semester credits required for Bachelor of Science degree.

Other Languages - 6 credits from one language

American Sign Language, Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Pre-Athletic Training

<http://www.purdue.edu/hhs/hk/undergraduate/majors/>

Program Requirements

Fall 1st Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HK 10100 - Clinical Practice in Athletic Training - Orientation

Credit Hours: 1.00. Under supervision of the certified athletic trainer, students will undertake observation of training room operations and duties of the athletic trainer. Acquisition of basic skills and knowledge is expected. Typically offered Spring Fall.

MA 15800 - Precalculus- Functions And Trigonometry

Credit Hours: 3.00. Functions, Trigonometry, and Algebra of calculus topics designed to fully prepare students for all first semester calculus courses. Functions topics include Quadratic, Higher Order Polynomials, Rational, Exponential, Logarithmic, and Trigonometric. Other focuses include graphing of functions and solving application problems. Not Available for credit toward graduation in the College of Science. Students may not receive credit for both MA 15400 and MA 15800. Students may not receive credit for both MA 15900 and MA 15800. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

- Elective - Credit Hours: 0.00 - 1.00

15 Credits

Spring 1st Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

HK 10100 - Clinical Practice in Athletic Training - Orientation

Credit Hours: 1.00. Under supervision of the certified athletic trainer, students will undertake observation of training room operations and duties of the athletic trainer. Acquisition of basic skills and knowledge is expected. Typically offered Spring Fall.

HK 13500 - Introduction To Health And Kinesiology

Credit Hours: 1.00. Overviews the disciplines of health and kinesiology. Students explore skills and academic interests in these areas. Describes career opportunities and options for graduate study. Provides strategies for professional and portfolio development. Students complete five hours of community service per semester. Typically offered Fall Spring.

HK 20800 - Prevention And Treatment Of Athletic Injuries

Credit Hours: 3.00. Provides the physical educator, coach, and athletic training student with an introduction to the prevention, recognition, and treatment of common athletic injuries, and response to common emergency situations. American Red Cross Community First Aid and CPR certification is included. PE teaching majors and minors, athletic training majors, and coaching endorsement students only. Typically offered Fall Spring.

- Oral Communication - Credit Hours: 3.00 *
- Elective - Credit Hours: 3.00

15 Credits

Admittance to Athletic Training Program Required to Continue

Athletic Training

Program Requirements

Fall 2nd Year

- Chemistry - Credit Hours: 3.00 - 4.00

HK 20100 - Clinical Practice In Athletic Training - Assist

Credit Hours: 2.00. Under supervision of the certified athletic trainer, students will be provided the opportunity to practice those skills required of the athletic trainer. The student will assist the staff and upperclass students. Typically offered Fall Spring.

HK 30200 - Applied Clinical Anatomy

Credit Hours: 3.00. An introduction to the regional anatomical study of the human body for undergraduate allied health students. Lectures will be supplemented by observation and demonstration of prosected cadaver material, radiographs, osteology, and surface anatomy. Typically offered Fall.

HK 30500 - Injury Assessment I

Credit Hours: 3.00. A guided lecture and demonstration experience designed to expose the student to the techniques normally required of an athletic trainer. Topics include splinting and transportation, equipment fitting and fabrication, lower extremity injury evaluation, taping and bracing. Typically offered Fall.

- Other Language 10100 - Credit Hours: 3.00 *
- Elective - Credit Hours: 1.00 - 2.00

15 - 17 Credits

Spring 2nd Year

HK 20100 - Clinical Practice In Athletic Training - Assist

Credit Hours: 2.00. Under supervision of the certified athletic trainer, students will be provided the opportunity to practice those skills required of the athletic trainer. The student will assist the staff and upperclass students. Typically offered Fall Spring.

HK 26100 - Applied Anatomy And Kinesiology

Credit Hours: 3.00. The study of how muscles, bones, and joint structure produce human motion. Kinesiological analysis of full body, upper and lower extremity skills. Typically offered Spring.

HK 30600 - Injury Assessment II

Credit Hours: 3.00. A continuation of HK 30500. A guided lecture and demonstration experience designed to expose the student to the techniques of the upper extremity, head, neck, abdomen, and thorax, along with associated taping, padding, and bracing. Typically offered Spring.

- Other Language 10200 - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

17 Credits

Fall 3rd Year

HK 21500 - Basic Public Health Studies

Credit Hours: 3.00. Examination of basic scientific concepts as applied to the problems and issues in selected areas of human health behavior with particular attention to their influence on population and individual health. Restricted to students enrolled in major degree programs for which this course is a requirement. Typically offered Fall Spring.

HK 30100 - Clinical Practice In Athletic Training - Associate

Credit Hours: 2.00. Under the supervision of a certified athletic trainer, students will be provided the opportunity to practice those skills required of an athletic trainer. Independent practice as an athletic trainer. Typically offered Fall Spring.

HK 30300 - Athletic Training Modalities

Credit Hours: 3.00. Theory and practice in the use of physical agents used in the management and promotion of healing of athletic injuries. Typically offered Spring.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

- Physics - Credit Hours: 3.00 - 4.00

14 - 15 Credits

Spring 3rd Year

HK 30100 - Clinical Practice In Athletic Training - Associate

Credit Hours: 2.00. Under the supervision of a certified athletic trainer, students will be provided the opportunity to practice those skills required of an athletic trainer. Independent practice as an athletic trainer. Typically offered Fall Spring.

HK 30400 - Therapeutic Exercise

Credit Hours: 3.00. This course will introduce the athletic training student to the planning and implementation of a comprehensive reconditioning program for injuries sustained by athletes. Techniques of therapeutic exercise as they apply to athletic training will be examined. Typically offered Spring.

HK 37200 - Sport And Exercise Psychology I

Credit Hours: 3.00. This course focuses on social and psychological factors related to participation in sport, exercise, and physical activity. The class explores both (a) how social and psychological factors influence participation and performance in physical activity, and (b) how sport, exercise, and physical activity participation affects psychological well-being. Topics include personality, socialization, learning and feedback, stress and coping, self-perceptions, motivation, and psychological methods for enhancing personal development and physical performance. Typically offered Fall Spring Summer.

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

- Elective - Credit Hours: 3.00

14 Credits

Fall 4th Year

HK 40100 - Clinical Practice In Athletic Training - Lead

Credit Hours: 2.00. Under the supervision of the certified athletic trainer, the student will be provided the opportunity to practice those skills acquired. The student is expected to take a leadership role in the clinical setting. Typically offered Fall Spring.

HK 40500 - Administration Of Athletic Training Programs

Credit Hours: 3.00. Advanced theory in the more complex injuries associated with athletics. Organization of athletic training programs, nontraumatic medical problems, pharmacology, and athletic nutrition also will be studied. Typically offered Spring.

- Science, Technology, & Society* or Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00 - 4.00

14 - 15 Credits

Spring 4th Year

HK 40100 - Clinical Practice In Athletic Training - Lead

Credit Hours: 2.00. Under the supervision of the certified athletic trainer, the student will be provided the opportunity to practice those skills acquired. The student is expected to take a leadership role in the clinical setting. Typically offered Fall Spring.

HK 40200 - Pathophysiology For Allied Health Professions

Credit Hours: 3.00. Overview of the etiology, pathogenesis, and clinical features of common illnesses and diseases that affect the human body's various organ systems. Emphasis is placed on cellular adaptation to disease and tissue response to damage. Typically offered Spring.

HK 40900 - Seminar In Sports Medicine

Credit Hours: 3.00. A review of selected medical aspects of sports. Liberal use of guest medical professionals. A broad look at the field of sports medicine. Typically offered Spring.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

14 Credits

Note

* Satisfies a University Foundational Learning Outcome

Students must earn a "C-" or higher in all required HK courses.

120 semester credits required for Bachelor of Science degree.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Movement and Sports Sciences, BS

About the Program

The Movement & Sport Sciences major is based on the idea of studying human movement and sport from the point of view of sub-disciplines in kinesiology. The curriculum includes courses in exercise physiology, biomechanics, motor control, motor development, and sport and exercise psychology. Students take advanced courses in three of these areas. After completing the foundational and advanced courses, students can work with a professor to conduct research. This major offers excellent preparation for students who plan to attend graduate school in an area of kinesiology or professional school. Examples include physical therapy (PT), occupational therapy (OT), medicine, chiropractic, biomechanics, exercise physiology, motor learning, motor development, etc.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Movement and Sport Sciences include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HK-BS
MVMT
120 Credits

Major Requirements (31 credits)

HK 13500 - Introduction To Health And Kinesiology

Credit Hours: 1.00. Overviews the disciplines of health and kinesiology. Students explore skills and academic interests in these areas. Describes career opportunities and options for graduate study. Provides strategies for professional and portfolio development. Students complete five hours of community service per semester. Typically offered Fall Spring.

HK 25300 - Principles Of Motor Development

Credit Hours: 3.00. This course provides an introduction to motor development from a life-span perspective. Students will learn how infants develop from mainly reflexive beings into children and adults that are capable of interacting with the world in a goal-directed manner. This course specifically examines how changes in physical growth, aging, and maturation of the central nervous system influence motor performance. Finally, the decline of motor skills associated with advanced age is discussed. Typically offered Fall Spring.

HK 25800 - Foundations Of Motor Skill Learning

Credit Hours: 3.00. Concepts and principles of motor skill learning, with emphasis on the acquisition and retention of gross movement and sport skills. Typically offered Fall Spring.

HK 26300 - Biomechanical Foundations Of Motor Skills

Credit Hours: 3.00. Fundamental anatomical and mechanical concepts and procedures for analyzing motor skills, with particular reference to sport, dance, and aquatic activities. Typically offered Fall Spring.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

HK 37200 - Sport And Exercise Psychology I

Credit Hours: 3.00. This course focuses on social and psychological factors related to participation in sport, exercise, and physical activity. The class explores both (a) how social and psychological factors influence participation and performance in physical activity, and (b) how sport, exercise, and physical activity participation affects psychological well-being. Topics include personality, socialization, learning and feedback, stress and coping, self-perceptions, motivation, and psychological methods for enhancing personal development and physical performance. Typically offered Fall Spring Summer.

HK 37600 - History Of Sport

Credit Hours: 3.00. A prior course in American or world history is recommended but not required. A survey of historical events that have shaped classical and modern sport, with a focus on recent history of American sport. Typically offered Fall Spring.

Movement & Sport Sciences Selectives* - Select three of the following courses (9 credits)

HK 44300 - Neuroscience Of Movement

Credit Hours: 3.00. In this course students will learn about the neuroscience behind the control, sensation and perception of human movement. The course is divided into five sections. In the first section, students learn about the sensory systems with human movement. In the second section, students learn about the basic CNS building blocks underlying movement control and perception. In the third section, the control of balance and locomotion is the central topic. In the fourth section students learn about the higher brain functions involved in cognition. The final section of the class examines issues regarding learning, development, and brain plasticity. Typically offered Fall Spring.

HK 44400 - Motor Function In Older Adults

Credit Hours: 3.00. In this course, students learn about the decline in motor function that occurs in older adults and techniques to improve motor function in an older population. Topics include decreased balance control, loss of muscle strength, and declines in adaptive locomotion as a function of age. Students enrolled in this class also participate in an off-campus lab. In the lab, students are paired with an older adult and use the knowledge gained in lecture to improve the motor function of the older adult. This class provides students with a unique opportunity to gain hands-on experience working with an older population. Permission of instructor required. Typically offered Fall Spring.

HK 45300 - Motor Coordination And Development

Credit Hours: 3.00. An advanced undergraduate motor development course that examines the processes and coordination principles related to motor behavior development across the life span. Material and concepts are concentrated around specific skills areas and SPAN a broad range of ages and theoretical approaches. Typically offered Spring.

HK 45800 - Principles Of Motor Control And Learning

Credit Hours: 3.00. Discussion of the principles of motor learning and control. Relevant research literature will be surveyed with an historical perspective. Students will be expected to design and/or conduct a mini research project. Typically offered Fall Spring.

HK 46300 - Analysis Of Human Motion

Credit Hours: 3.00. An analytic approach to the mechanical analysis of human motion, including modeling procedures and computer-generated display techniques. Typically offered Fall Spring.

HK 46800 - Advanced Exercise Physiology II

Credit Hours: 3.00. An advanced undergraduate course in the area of exercise and human performance. Further examination of the physiological mechanisms and theories involved in the exercise response. Typically offered Fall Spring.

HK 47200 - Sport And Exercise Psychology II

Credit Hours: 3.00. Course presents topics not covered in PE 37200 and emphasizes application of psychological principles in sport and exercise settings. Topics include group dynamics, psychological benefits of exercise; exercise addiction; body image; leadership and communication; and performance enhancement principles and techniques. Typically offered Spring.

HK 47400 - Youth Physical Activity Behavior

Credit Hours: 3.00. This course addresses developmental, psychological, social, and contextual factors associated with physical activity behavior and sedentary behavior of young people. Students will consider fundamental questions and assumptions that

frame the study of youth physical behavior, be exposed to a breadth of empirical literature on youth physical activity and sedentary behavior, and learn how the existing knowledge base has been translated into physical activity promotion efforts. Typically offered Fall Spring.

HK 47600 - Olympic Games: Ancient And Modern

Credit Hours: 3.00. A historical study of the nature and significance of the ancient and modern Olympic Games. Topics include genesis of the games; evolution of events; the amateur ideal; social, economic, and commercial influences; politics; modern controversies; and various reform movements. Typically offered Spring.

HK 57200 - Sport In American Culture

Credit Hours: 3.00. Survey and critique of major sociological concepts, theoretical and methodological perspectives as they apply to dimensions of human play and sport. Class activity will include field experiments utilizing basic sociological methods. Typically offered Spring Fall.

Note

* Courses created by the MVMT faculty (HK 49000) may be substituted in this area upon approval of the HK Undergraduate Program Director. Contact your advisor for further information.

Directed Research - Select one of the following courses (3 credits)

HK 46500 - Research Methods

Credit Hours: 3.00. This course will be conducted in a lecture/lab format. The lectures will introduce the basic knowledge necessary to understanding the entire research process as it is found in health and kinesiology. The laboratories will be designed to give students practice in discovering research questions, preparing research proposals, evaluating existing research, and applying research to practical problems. Typically offered Fall Spring.

HK 49600 - Independent Inquiry in Movement and Sport Sciences

Credit Hours: 1.00 to 3.00. Students are engaged in a research project under the guidance of a faculty member in one of the areas of inquiry in the movement and sport sciences major. Permission of instructor required. Typically offered Spring Summer Fall.

Required Courses in Other Departments (45-48 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

- Culture & Diversity Selective - select from list - Credit Hours: 3.00

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 15800 - Precalculus- Functions And Trigonometry

Credit Hours: 3.00. Functions, Trigonometry, and Algebra of calculus topics designed to fully prepare students for all first semester calculus courses. Functions topics include Quadratic, Higher Order Polynomials, Rational, Exponential, Logarithmic, and Trigonometric. Other focuses include graphing of functions and solving application problems. Not Available for credit toward graduation in the College of Science. Students may not receive credit for both MA 15400 and MA 15800. Students may not receive credit for both MA 15900 and MA 15800. Typically offered Fall Spring Summer.

PHYS 22000 - General Physics

Credit Hours: 4.00. Mechanics, heat, and sound, for students not specializing in physics. Typically offered Fall Spring Summer. CTL:IPS 1751 Algebra-based Physics I

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- [Humanities Core] - select from University list - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list - Credit Hours: 3.00

Electives (41-44 credits)

Notes

Students must earn a "C-" or better in all HK courses.

At least 32 credits of Purdue coursework required at 30000 level or higher.

MVMT includes 24 credits (if taken at Purdue). See chart below.

120 semester credits required for Bachelor of Science degree.

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Culture & Diversity Selective List - 3 credits

AAS 27100 - Introduction To African American Studies

Credit Hours: 3.00. Introduction to the philosophical and methodological principles underlying Afro-American studies. Dimensions of the black experience, including history, education, politics, psychology, economics, religion, social organization, and art, will be covered, and the requisite academic tools and sources will be examined. Typically offered Fall Spring Summer.

AAS 27700 - African American Popular Culture

Credit Hours: 3.00. This course focuses on the production of popular culture through African-based and non African-based traditions among African Americans in the United States. Pop culture forms covered include film, theatre, visual arts, literature, dance, sports, music and religious traditions. Typically offered Summer Fall Spring.

AAS 37000 - Black Women Rising

Credit Hours: 3.00. This course examines the rise of black women and their impact on economic, social, and cultural issues. Typically offered Fall Spring.

AAS 37100 - The African American Experience

Credit Hours: 3.00. Focus on specific topics of the personal experiences of blacks, in Africa and the diaspora, including black identity, black culture, and the relationships between blacks and society. Typically offered Fall.

AAS 37300 - Issues In African American Studies

Credit Hours: 3.00. Focuses on a specific topic that relates to selected issues in the life, history, and culture of peoples of African ancestry. Typically offered Fall Spring.

AAS 37600 - The Black Male

Credit Hours: 3.00. This course examines critically the factors contributing to the deteriorating status of African American males and the positive ways of coping with that experience. Includes an overview of research perspectives defining current knowledge on the subject. Typically offered Fall Spring.

ANTH 20500 - Human Cultural Diversity

Credit Hours: 3.00. Using concepts and models of cultural anthropology, this course will survey the principal cultural types of the world and their distribution, and will undertake a detailed analysis of societies representative of each type. Typically offered Fall Spring.

ANTH 21200 - Culture, Food And Health

Credit Hours: 3.00. This course is designed to provide an introduction to the field of Medical Anthropology in which we will

examine issues related to health and illness from various perspectives outside of the Western biomedical perspective. Typically offered Fall Spring.

ANTH 23000 - Gender Across Cultures

Credit Hours: 3.00. Explores gender and sexuality from a cross-cultural perspective. Draws on case studies to explore the complexities of women's and men's lives. Examines gender hierarchies, gender in a globalized world, and the cultural construction of sexuality and gender. Typically offered Summer Fall Spring.

ANTH 34000 - Global Perspectives On Health

Credit Hours: 3.00. This course examines health issues and risks faced by individuals around the world, but especially in resource poor geographical areas. We will explore in-depth the gendered, ethnic, cultural, and class dimensions that underlie the patterning of disease and illness worldwide. Typically offered Fall Spring.

ANTH 37900 - Native American Cultures

Credit Hours: 3.00. General survey of Native cultures of the Americas. Topics to be covered include prehistory, language, religion, aesthetics, culture contact and change, contemporary issues, and social, economic and political organization. Typically offered Fall (and occasionally in the Spring).

ASAM 24000 - Introduction To Asian American Studies

Credit Hours: 3.00. A general introduction to Asian American history and culture, with a focus on the diverse and multifaceted experiences of peoples of Asian descent in America and their contributions to U.S. culture and society. Typically offered Spring.

ASAM 34000 - Contemporary Issues In Asian American Studies

Credit Hours: 3.00. Overviews various issues in contemporary Asian American Studies through theoretical and literary readings combined with examinations of popular media. Topics examine the multiple intersections of race, ethnicity, class, gender, and sexuality. Typically offered Spring.

ASL 28000 - American Deaf Community: Language, Culture, And Society

Credit Hours: 3.00. The linguistic, cultural, and societal context of the deaf community in America. Both historical and contemporary aspects of deaf identity will be included, with an emphasis on the central role that ASL plays in the lives of deaf individuals. Typically offered Spring.

CHNS 28000 - Topics in Chinese Civilization and Culture

Credit Hours: 3.00. Selected topics on Chinese civilization and culture including history and geography, Confucianism, contemporary China, education, family, international cultural and economic cooperation. Course materials also cover most current issues on and in Chinese-speaking communities. Lectures in English. Typically offered Fall Spring.

COM 22400 - Communicating In The Global Workplace

Credit Hours: 3.00. This introductory course explores communication issues that arise in the global workplace. The course develops an appreciation of the relationship among culture, communication, and ways of organizing and doing business. Typically offered Fall.

COM 30300 - Intercultural Communication

Credit Hours: 3.00. Study of the complex relationship between culture and communication in a variety of interpersonal, group, organizational, and computer-mediated settings. Application of theory and research to development of the knowledge, attitudes, and skills associated with intercultural communication competence. Typically offered Fall Spring.

COM 37600 - Communication And Gender

Credit Hours: 3.00. Course is based on the assumption that studies of gender and communication are intertwined. Focus is on communication processes that create symbols of gender and how those processes recreate the meanings of gender in the lives of individuals and groups. Typically offered Fall Spring.

COM 38100 - Gender And Feminist Studies In Communication

Credit Hours: 3.00. This course examines the ways in which communication constructs and maintains our conceptions of gender. It explores different approaches to the study of gender and feminist issues in public, organizational, and mass communication. Typically offered Fall Spring.

HDFS 28000 - Diversity In Individual And Family Life

Credit Hours: 3.00. Students are introduced to aspects of individual and family life in diverse cultures, particularly racially and/or ethnically diverse families in the United States. The nature of relationships between dominant and minority cultures is considered. Implications of diversity for practice with diverse populations are emphasized throughout the course. Typically offered Fall Spring Summer.

HIST 21000 - The Making Of Modern Africa

Credit Hours: 3.00. This course provides students with a comprehensive introduction to modern African history from 1800 to the present. Using a variety of films, novels and scholarly resources, we will examine the major historical forces that have shaped African lives over the last two centuries. Emphasis will be placed on African experiences of slavery, colonialism, liberation struggles, and post-independence national building. Students will also learn to analyze contemporary African issues within a larger historical context. Typically offered Fall Spring.

HIST 24000 - East Asia And Its Historic Tradition

Credit Hours: 3.00. Survey of the great historic traditions of China, Japan, and Korea from earliest times to approximately 1600, with special attention to state formation, society, intellectual, philosophical, and religious developments, and the visual, musical, and literary arts. Typically offered Fall.

HIST 24100 - East Asia In The Modern World

Credit Hours: 3.00. The response of China, Japan, and Korea to the coming of the West in modern times, with special stress on the effect of Western ideas and machines. Approximately 1600 to the present. Typically offered Spring.

HIST 24300 - South Asian History And Civilizations

Credit Hours: 3.00. Survey history of India, Pakistan, and Bangladesh, from the origins of South Asian civilization to the present. Topics include ancient India, the Mughal Empire, the colonial experience, the independence movement, and conflict and popular culture. Typically offered Fall Spring.

HIST 24500 - Introduction To The Middle East History And Culture

Credit Hours: 3.00. A survey of the civilization of the Middle East from the rise of Islam to the present. The political, social, and cultural institutions are examined along with the problem of adjusting these to the pressure of Western civilization in the last two centuries. Typically offered Fall Spring.

HIST 24600 - Modern Middle East And North Africa

Credit Hours: 3.00. This course explores the political, social, and cultural factors that have contributed to the formation of the modern Middle East. Course includes short stories and a selection of documentary films from the region. Typically offered Summer Fall Spring.

HIST 27100 - Introduction To Colonial Latin American History (1492-1810)

Credit Hours: 3.00. The purpose of this general survey course is to introduce students to the principle historical themes of Latin

America during the colonial period (roughly, from 1492 to 1810). No prior knowledge of Latin American history is required. Typically offered Fall Spring Summer.

HIST 27200 - Introduction To Modern Latin American History (1810 To The Present)

Credit Hours: 3.00. The purpose of this general survey course is to introduce students to the study of the major economic, political, social, and cultural processes that shaped modern Latin American nations since independence. No prior knowledge of Latin American history is required. Typically offered Fall Spring Summer.

HIST 34100 - History Of Africa South Of The Sahara

Credit Hours: 3.00. An introductory survey of major movements and problems in the development of the people of sub-Saharan Africa from the dawn of history to the mid-twentieth century. Attention is directed to the response of Africans to their environment and to various external challenges - Islam, European colonization, and the industrial revolution. Typically offered Fall Spring.

HIST 34200 - Africa And The West

Credit Hours: 3.00. The study of Africa's relations with Europe and the Americas, emphasizing economic and cultural crosscurrents from the period of the Atlantic slave trade to the rise of modern nationalism. Typically offered Fall Spring.

HIST 34400 - History Of Modern Japan

Credit Hours: 3.00. A survey of Japanese history from the nineteenth century to the present, including Japan's response to Western expansionism, the formation of the modern state, political parties, industrialization, the Pacific War, the American Occupation, the postwar "economic miracle," and Japan today. Typically offered Spring.

HIST 36600 - Hispanic Heritage Of The United States

Credit Hours: 3.00. Despite their numerical prominence, Hispanics have received relatively little attention in traditional U.S. history. Focusing primarily on Mexican-Americans, Cuban-Americans, and Puerto Ricans, this course offers a historical perspective on the Hispanic experience from colonial times to the present. Typically offered Fall Spring Summer.

HIST 37700 - History And Culture Of Native America

Credit Hours: 3.00. This course explores the societies of Native North America in a historical context, from pre-historic times to the present, examining Native world views and belief systems to understand their historical relations with each other, and with Europeans and their descendents. Typically offered Fall Spring.

JWST 33000 - Introduction To Jewish Studies

Credit Hours: 3.00. An interdisciplinary course touching on the full range of Jewish experience from antiquity to the present. Several members of the Jewish Studies faculty and guest lecturers participate, representing such fields as anthropology, history, language, literature, philosophy, politics, religion, and sociology. Typically offered Spring.

LALS 25000 - Introduction To Latin American And Latino Studies

Credit Hours: 3.00. Interdisciplinary and integrative presentation and examination of the historical, political, economic, and cultural processes of Latin America, from independence to the present followed by an analysis of scholarly works that include theoretical models, methodological strategies, and analytical approaches to learning about US Latinos. Special emphasis is placed on the immigrant experience and its role in the incorporation of Latinos into the US society. Typically offered Fall.

PHIL 22500 - Philosophy And Gender

Credit Hours: 3.00. An examination of the beliefs, assumptions, and values found in traditional and contemporary philosophical analyses of women. A range of feminist approaches to knowledge, values, and social issues will be introduced. Typically offered Fall Spring.

PHIL 24200 - Philosophy, Culture, And The African American Experience

Credit Hours: 3.00. The purpose of this course is to consider African American based or inspired conceptions of Western philosophy and new visions of what it is to do philosophy sensitive to culturally rooted diversity. Typically offered Fall Spring.

POL 22200 - Women, Politics, And Public Policy

Credit Hours: 3.00. An introduction to women's participation in politics, with an emphasis on America. Structural and attitudinal conditions limiting women's political roles and contemporary efforts to change women's status in society through politics. Typically offered Summer Fall Spring.

PSY 23900 - The Psychology Of Women

Credit Hours: 3.00. The purpose of the course is to provide an overview of the psychology of women. Topics include stereotyping, women and achievement, aggression and power, the psychological concept of androgyny, and attitudes toward feminism. Typically offered Summer Fall Spring.

PSY 33500 - Stereotyping And Prejudice

Credit Hours: 3.00. This course examines the topics of stereotyping, prejudice, and discrimination from a social psychological perspective. Relying on empirical findings and relevant theoretical approaches, the course moves beyond lay opinions to explore the social psychological foundations and forms of stereotyping and prejudice, and to examine various strategies for reducing intergroup biases. Typically offered Fall Spring.

PSY 36800 - Children's Development In Cross-Cultural Perspective

Credit Hours: 3.00. Surveys the development of children from different cultures. Topics include: Studying the development of children from other cultures, cultural similarities and differences in children's development, what leads to cultural differences in development, implications for children of clashes in cultural values. Typically offered Fall Spring.

SOC 31000 - Racial And Ethnic Diversity

Credit Hours: 3.00. Examines racial and ethnic pluralism in America: ways groups have entered our society; their social and cultural characteristics; and their relationships with other groups. Groups include the English, Germans, Irish, Jews, Chinese, Japanese, Blacks, Hispanics, and Native Americans. Typically offered Fall.

SOC 33900 - Introduction To The Sociology Of Developing Nations

Credit Hours: 3.00. Analysis of the causes of development in the Third World. Topics include: the food crisis; population growth; poverty and inequality; industrialization, including the role of multinational corporations; debt; and the International Monetary Fund. Regional differences in patterns and causes analyzed. Typically offered Fall Spring.

SOC 45000 - Gender Roles In Modern Society

Credit Hours: 3.00. A critical examination of the complementary roles of men and women, with particular attention to problems of role adjustment in the contemporary United States. The neofeminist movement and countermovements. Role conflicts and adjustments in such areas as family, education, employment, and the political arena. Typically offered Fall Spring.

WGSS 28000 - Women's Studies: An Introduction

Credit Hours: 3.00. An introductory survey of the concepts and research data in the new scholarship on women. Topics covered include biology, sexuality, socialization, family and work, creativity, and politics. Typically offered Summer Fall Spring.

WGSS 38000 - Gender And Multiculturalism

Credit Hours: 3.00. This course expands students' understanding of gender issues by exploring the multicultural diversity of women's lives. It examines how race, class, sexuality, and culture interact and shape society and ecology in the United States and in a global context. Typically offered Fall Spring.

WGSS 38100 - Women Of Color In The United States

Credit Hours: 3.00. Explores the diversity of racial and ethnic groups in the United States with a particular emphasis on the histories, experiences, and cultural contributions of women of color. Provides a broad introduction to the intersections of gender, race and ethnicity. Typically offered Fall Spring.

WGSS 38300 - Women And Work

Credit Hours: 3.00. Examines race, class and gender issues as they affect working women in America. Covering women's work from domestic labor to informal economies to factories, topics include women's participation in trade unions, wage inequalities, family leave policies and sexual harrassment. Typically offered Fall Spring.

- Study Abroad Course upon approval of HK department

32 Credits @ 30000 Level

MVMT HK Courses*	21
STAT 30100*	3

** Assuming no transfer credits.*

Program Requirements

<http://www.purdue.edu/hhs/hk/undergraduate/majors/>

Fall 1st Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative

and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

HK 13500 - Introduction To Health And Kinesiology

Credit Hours: 1.00. Overviews the disciplines of health and kinesiology. Students explore skills and academic interests in these areas. Describes career opportunities and options for graduate study. Provides strategies for professional and portfolio development. Students complete five hours of community service per semester. Typically offered Fall Spring.

MA 15300 - Algebra And Trigonometry I

Credit Hours: 3.00. Exponents and radicals; algebraic and fractional expressions. Equations and inequalities, systems of linear equations. Polynomial, exponential, and logarithmic functions. Not open to students with credit in MA 15900. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring Summer. CTL:IMA 1601 College Algebra

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

14 Credits

Spring 1st Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

- Humanities - Credit Hours: 3.00 *
- Elective - Credit Hours: 3.00

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

16 - 17 Credits

Fall 2nd Year

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

HK 25800 - Foundations Of Motor Skill Learning

Credit Hours: 3.00. Concepts and principles of motor skill learning, with emphasis on the acquisition and retention of gross movement and sport skills. Typically offered Fall Spring.

HK 26300 - Biomechanical Foundations Of Motor Skills

Credit Hours: 3.00. Fundamental anatomical and mechanical concepts and procedures for analyzing motor skills, with particular reference to sport, dance, and aquatic activities. Typically offered Fall Spring.

- Science, Technology, & Society - Credit Hours: 3.00 *
- Elective - Credit Hours: 3.00

15 - 16 Credits

Spring 2nd Year

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

HK 25300 - Principles Of Motor Development

Credit Hours: 3.00. This course provides an introduction to motor development from a life-span perspective. Students will learn how infants develop from mainly reflexive beings into children and adults that are capable of interacting with the world in a goal-directed manner. This course specifically examines how changes in physical growth, aging, and maturation of the central nervous system influence motor performance. Finally, the decline of motor skills associated with advanced age is discussed. Typically offered Fall Spring.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress.

Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- Elective - Credit Hours: 3.00

15 - 16 Credits

Fall 3rd Year

- Culture & Diversity Selective - Credit Hours: 3.00

HK 37200 - Sport And Exercise Psychology I

Credit Hours: 3.00. This course focuses on social and psychological factors related to participation in sport, exercise, and physical activity. The class explores both (a) how social and psychological factors influence participation and performance in physical activity, and (b) how sport, exercise, and physical activity participation affects psychological well-being. Topics include personality, socialization, learning and feedback, stress and coping, self-perceptions, motivation, and psychological methods for enhancing personal development and physical performance. Typically offered Fall Spring Summer.

PHYS 22000 - General Physics

Credit Hours: 4.00. Mechanics, heat, and sound, for students not specializing in physics. Typically offered Fall Spring Summer. CTL:IPS 1751 Algebra-based Physics I

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

- Movement & Sport Sciences Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

HK 37600 - History Of Sport

Credit Hours: 3.00. A prior course in American or world history is recommended but not required. A survey of historical events that have shaped classical and modern sport, with a focus on recent history of American sport. Typically offered Fall Spring.

- Movement & Sport Sciences Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00 - 3.00

13 - 15 Credits

Spring 4th Year

- Directed Research (HK 46500 or HK 49600) - Credit Hours: 3.00
- Movement & Sport Sciences Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00 - 2.00

13 - 14 Credits

Note

* Satisfies a University Foundational Learning Outcome

Students must earn a "C-" or higher in all required HK courses.

120 semester credits required for Bachelor of Science degree.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Public Health, BS

About the Program

The Public Health major prepares students to plan, implement, and evaluate public health programs for individuals, groups, and populations in a variety of settings that include worksites, hospitals, schools, and communities. As healthcare costs continue to rise in the United States, training a highly skilled public health workforce is becoming a much greater priority. Courses in this major introduce students to the five core public health competency areas (Behavioral Social Sciences, Biostatistics, Environmental Health, Epidemiology, and Health Policy and Management). An internship at a worksite or in a clinical, community, or government public health setting is part of the curriculum. The goal of the program is to prepare students for entry-level positions in a variety of public health areas. Some students choose to pursue graduate or professional education in areas such as public health (e.g., a Master of Public Health is offered by the Department), nursing, occupational (OT) or physical therapy (PT), and medicine.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Public Health include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HK-BS
PUBH
120 Credits

Major Requirements (44-46 credits)

HK 13500 - Introduction To Health And Kinesiology

Credit Hours: 1.00. Overviews the disciplines of health and kinesiology. Students explore skills and academic interests in these areas. Describes career opportunities and options for graduate study. Provides strategies for professional and portfolio development. Students complete five hours of community service per semester. Typically offered Fall Spring.

HK 21500 - Basic Public Health Studies

Credit Hours: 3.00. Examination of basic scientific concepts as applied to the problems and issues in selected areas of human health behavior with particular attention to their influence on population and individual health. Restricted to students enrolled in major degree programs for which this course is a requirement. Typically offered Fall Spring.

HK 26900 - Career Development And Preparation For The Health And Fitness Fields

Credit Hours: 1.00. Provides students with basic professional skills and materials for subsequent practicum experience and future employment search. Students will have secured a viable practicum site, complete with written job description/responsibilities, at the completion of the course. Typically offered Fall Spring.

HK 36500 - Principles Of Community Health Promotion

Credit Hours: 3.00. Provides an overview of community health promotion. Includes such topics as organization, financing, and delivery of personal health requirements for comprehensive health promotion. These include health care, health education, and health policy. Typically offered Fall.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HK 36600 - Health Behavior And Health Promotion

Credit Hours: 3.00. Introduces health behavior theory and practice in the context of health promotion and education. Examines individual, interpersonal, and community approaches to explaining and predicting health behavior and emphasizes their application to interventions in health promotion and education. Typically offered Fall Spring Summer.

HK 38500 - Methods Of Health Promotion And Education

Credit Hours: 3.00. Methods and materials of health promotion and education; preparation and use of content and materials related to health concerns of target populations. A variety of strategies and media are covered with theoretical and practical applications. Typically offered Fall Spring.

HK 44000 - Human Diseases And Disorders

Credit Hours: 3.00. The major communicable and noncommunicable diseases and disorders that afflict modern man, with particular emphasis upon the etiology, epidemiology, and ecology of these diseases and disorders. Typically offered Fall Spring.

HK 44500 - Principles Of Epidemiology

Credit Hours: 3.00. The study of the distribution of diseases in human populations and factors that influence these distributions. Typically offered Fall Spring.

HK 46500 - Research Methods

Credit Hours: 3.00. This course will be conducted in a lecture/lab format. The lectures will introduce the basic knowledge necessary to understanding the entire research process as it is found in health and kinesiology. The laboratories will be designed to give students practice in discovering research questions, preparing research proposals, evaluating existing research, and applying research to practical problems. Typically offered Fall Spring.

HK 49200 - Professional Work Experience IV

Credit Hours: 1.00. Practical experience in professional employment. Programs must be preplanned and conducted under direction of the departmental coordinator and agency supervisor. Students will submit documentaton of practical experiences. Permission of instructor required. Typically offered Fall Spring Summer.

NUR 22201 - Population Health

Credit Hours: 2.00. A comprehensive introduction to population health concepts and practices through examination of philosophy, purpose, functions, activities and tools. Multiple determinants (genetics, cultural, social, and behavioral factors) that influence population health and illness are explored including the contribution of these factors to health disparities. Population-focused initiatives for health promotion and disease prevention are examined within the context of local to global public health systems. Typically offered Fall Spring Summer.

Concentration Required For Major

Behavioral Social Sciences Concentration - BSSC

BIOL 14600 - Introduction To Biology

Credit Hours: 3.00. This course is designed to introduce non-majors to basic concepts in biology including hypothesis testing, biomolecules, cell structure and function, molecular biology and evolution. Emphasis will be placed on how these topics relate to

human health and disease and to the health of the environment. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

- Intro Course - select from list - Credit Hours: 3.00
- BSSC Concentration Selective - select from list - Credit Hours: 3.00
- BSSC Concentration Selective - select from list - Credit Hours: 3.00
- BSSC Concentration Selective - select from list - Credit Hours: 3.00
- BSSC Concentration Selective - select from list - Credit Hours: 3.00

Biostatistics/Communications & Informatics/Systems Thinking Concentration - BCIS

CGT 14100 - Internet Foundations Technologies And Development

Credit Hours: 3.00. (CNIT 14100) The course explores the history, architecture, and development of the World Wide Web. Current tagging and scripting languages are covered in a tool-independent environment. Topics also include authoring tools, design, graphic and multimedia formats, and commerce, implementation, and security issues. PC literacy required. Typically offered Fall Spring.

- BCIS Concentration Selective - select from list - Credit Hours: 3.00
- BCIS Concentration Selective - select from list - Credit Hours: 3.00
- BCIS Concentration Selective - select from list - Credit Hours: 3.00
- BCIS Concentration Selective - select from list - Credit Hours: 3.00
- BCIS Concentration Selective - select from list - Credit Hours: 3.00

Environmental Health/Epidemiology/Public Health Biology Concentration - EHEP

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

- EHEP Concentration Selective - select from list - Credit Hours: 3.00
- EHEP Concentration Selective - select from list - Credit Hours: 3.00
- EHEP Concentration Selective - select from list - Credit Hours: 3.00
- EHEP Concentration Selective - select from list - Credit Hours: 3.00

Health Policy & Management Concentration - HPMG

IT 44600 - Six Sigma Quality

Credit Hours: 3.00. A study of the six sigma quality and process improvement methodology, using the define, measure, analyze, improve, and control (DMAIC) process. The course addresses advanced topics in statistical quality as they pertain to the six sigma methodology and provides preparation for the Green Belt Certification exam. Typically offered Fall Spring Summer.

TLI 43640 - Lean Six Sigma

Credit Hours: 3.00. A study of the Lean Six Sigma quality and process improvement methodology, using the define, measure, analyze, improve, and control (DMAIC) process. The course addresses advanced topics in statistical quality; introduces quality management concepts as they pertain to the Lean Six Sigma methodology; and provides preparation for the Green Belt Certification exam. Typically offered Fall Spring Summer.

POL 12000 - Introduction To Public Policy And Public Administration

Credit Hours: 3.00. An introduction to the fields of public policy and public administration. Processes of policy formation and administration are examined. Different approaches to evaluating and improving public policies are discussed. Typically offered Summer Fall Spring.

- HPMG Concentration Selective - select from list - Credit Hours: 3.00
- HPMG Concentration Selective - select from list - Credit Hours: 3.00
- HPMG Concentration Selective - select from list - Credit Hours: 3.00
- HPMG Concentration Selective - select from list - Credit Hours: 3.00

Global Health Concentration - GHLH

- Intro Course - select from list - Credit Hours: 3.00
- CHLH Concentration Selective - select from list - Credit Hours: 3.00
- CHLH Concentration Selective - select from list - Credit Hours: 3.00
- CHLH Concentration Selective - select from list - Credit Hours: 3.00
- CHLH Concentration Selective - select from list - Credit Hours: 3.00
- CHLH Concentration Selective - select from list - Credit Hours: 3.00

Interdisciplinary Concentration - INTC (by approval only)

- Intro Course - approved by Public Health Faculty - Credit Hours: 3.00
- Intro Course - approved by Public Health Faculty - Credit Hours: 3.00
- INTC Concentration Selective - approved by Public Health Faculty - Credit Hours: 3.00
- INTC Concentration Selective - approved by Public Health Faculty - Credit Hours: 3.00

- INTC Concentration Selective - approved by Public Health Faculty - Credit Hours: 3.00
- INTC Concentration Selective - approved by Public Health Faculty - Credit Hours: 3.00

Required Courses in Other Departments (56-60 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

ENGL 42000 - Business Writing

Credit Hours: 3.00. Workplace writing in networked environments for management contexts. Emphasizes organizational context, project planning, document management, ethics, research, team writing. Typical genres include management memos, reports, letters, e-mail, resumes (print and online), oral presentations. Typically offered Summer Fall Spring.

ENGL 42100 - Technical Writing

Credit Hours: 3.00. Workplace writing in networked environments for technical contexts. Emphasizes context and user analysis, data analysis/display, project planning, document management, usability, ethics, research, team writing. Typical genres include technical reports, memos, documentation, Web sites. Typically offered Fall Spring Summer.

ENGL 42201 - Writing For The Health And Human Sciences

Credit Hours: 3.00. This course applies rhetorical principles to writing in health, hospitality, nutrition, nursing and related fields in the Health and Human Sciences. Typically offered Fall Spring Summer.

MA 15300 - Algebra And Trigonometry I

Credit Hours: 3.00. Exponents and radicals; algebraic and fractional expressions. Equations and inequalities, systems of linear equations. Polynomial, exponential, and logarithmic functions. Not open to students with credit in MA 15900. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring Summer. CTL:IMA 1601 College Algebra

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- Culture & Diversity Selective - select from list - Credit Hours: 3.00
- Leadership/Policy Selective - select from list - Credit Hours: 3.00
- Psychology Selective - select from list - Credit Hours: 3.00
- Sociology Selective - select from list - Credit Hours: 3.00
- 10100 Other Language **[Fulfills Humanities Core]** - Credit Hours: 3.00
- 10200 Other Language (*total of 6 credits - must be from one language*) - Credit Hours: 3.00
- **[Science, Technology & Society Core]** - select from PUBH Core Science, Technology, & Society list (HSCI 20100, if selected in major requirements, fulfills this requirement)

Electives (14-20 credits)

Requirements

Students must earn a "C-" or better in all HK courses.

At least 32 credits of Purdue coursework required at 30000 level or higher.

120 semester credits required for Bachelor of Science degree.

32 Credits @ 30000 Level*

PUBH HK Courses*	16-19
ENGL 42000*, ENGL 42100*, or ENGL 42201*	3
STAT 30100*	3

* Assuming no transfer credits.

Selective List

Humanities Core - 3 credits

University Foundational Learning Outcomes List:

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

PUBH Core Science, Technology & Society List - 3 credits

AGR 29000 - Special Topics In Agriculture

Credit Hours: 0.00 to 3.00. Presentation of subject matter not available in other courses offered by the college. The specific topic that is offered will be indicated on the student's academic record. Typically offered Summer Fall Spring.

ANTH 21000 - Technology And Culture

Credit Hours: 3.00. This course explores the social dimensions of technology from the perspective of ancient, modern, and post-modern society. Topics include the origins of particular technologies; processes of technical development and dissemination; the politics of everyday artifacts; virtual identities; and technologies of the body. Suggested courses (not pre-requisite): ANTH 10000, ANTH 20100 and/or ANTH 20500. Typically offered Fall Spring.

COM 25100 - Communication, Information, And Society

Credit Hours: 3.00. This course provides an introduction to information and communication technologies, including media and computer-related technologies. Basic information and technical literacy skills are developed, while discussing fundamental concepts of mediated communication in 21st century contexts. Typically offered Fall Spring Summer.

EAPS 11300 - Introduction To Environmental Science

Credit Hours: 3.00. (NRES 29000, AGRY 29000) An introduction to environmental science, including issues such as climate change, energy resources, air and water pollution, toxic waste disposal, soil erosion, natural hazards, and environmental planning. Includes extensive in-class discussion of case studies. Typically offered Fall.

FNR 22310 - Introduction To Environmental Policy

Credit Hours: 3.00. (POL 22300) Study of decision making as modern societies attempt to cope with environmental and natural resources problems. Focuses on the American political system, with some attention to the international dimension. Current policies and issues will be examined. Typically offered Fall Spring.

FNR 23000 - The World's Forests And Society

Credit Hours: 3.00. Examination of structure, function, and environmental and cultural significance of forest ecosystems throughout the world. Typically offered Fall.

FS 16100 - Science Of Food

Credit Hours: 3.00. Chemical and physical properties of foods; issues pertaining to safety, food-diet-health relationship; government regulations pertaining to food safety, quality and additives; preservation techniques and transformation of agricultural commodities to food products; Food facts, myths, and practices that are important for making intelligent food decisions. Course may also be offered for dual credit with cooperating Indiana high schools upon documented approval by the Department of Food Science. Typically offered Fall.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

NRES 29000 - Introduction To Environmental Science

Credit Hours: 3.00. (EAPS 11300, AGRY 29000) An introduction to environmental science, including issues such as air and water pollution, toxic waste disposal, soil erosion, natural hazards, climate change, energy resources, and environmental planning. Includes extensive in-class discussion of case studies. Typically offered Fall.

PHIL 27000 - Biomedical Ethics

Credit Hours: 3.00. An examination of the moral problems raised by developments in medicine and the biomedical sciences. Topics include abortion, reproductive technologies, euthanasia and physician-assisted suicide, experiments involving human subjects, and health care delivery. Typically offered Fall Spring.

POL 22300 - Introduction To Environmental Policy

Credit Hours: 3.00. (FNR 22310) Study of decision making as modern societies attempt to cope with environmental and natural resources problems. Focuses on the American political system, with some attention to the international dimension. Current policies and issues will be examined. Typically offered Fall Spring.

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

Culture & Diversity Selective List - 3 credits

AAS 27100 - Introduction To African American Studies

Credit Hours: 3.00. Introduction to the philosophical and methodological principles underlying Afro-American studies. Dimensions of the black experience, including history, education, politics, psychology, economics, religion, social organization, and art, will be covered, and the requisite academic tools and sources will be examined. Typically offered Fall Spring Summer.

AAS 27700 - African American Popular Culture

Credit Hours: 3.00. This course focuses on the production of popular culture through African-based and non African-based traditions among African Americans in the United States. Pop culture forms covered include film, theatre, visual arts, literature, dance, sports, music and religious traditions. Typically offered Summer Fall Spring.

AAS 37000 - Black Women Rising

Credit Hours: 3.00. This course examines the rise of black women and their impact on economic, social, and cultural issues. Typically offered Fall Spring.

AAS 37100 - The African American Experience

Credit Hours: 3.00. Focus on specific topics of the personal experiences of blacks, in Africa and the diaspora, including black identity, black culture, and the relationships between blacks and society. Typically offered Fall.

AAS 37300 - Issues In African American Studies

Credit Hours: 3.00. Focuses on a specific topic that relates to selected issues in the life, history, and culture of peoples of African ancestry. Typically offered Fall Spring.

AAS 37600 - The Black Male

Credit Hours: 3.00. This course examines critically the factors contributing to the deteriorating status of African American males and the positive ways of coping with that experience. Includes an overview of research perspectives defining current knowledge on the subject. Typically offered Fall Spring.

ANTH 20500 - Human Cultural Diversity

Credit Hours: 3.00. Using concepts and models of cultural anthropology, this course will survey the principal cultural types of the world and their distribution, and will undertake a detailed analysis of societies representative of each type. Typically offered Fall Spring.

ANTH 21200 - Culture, Food And Health

Credit Hours: 3.00. This course is designed to provide an introduction to the field of Medical Anthropology in which we will examine issues related to health and illness from various perspectives outside of the Western biomedical perspective. Typically offered Fall Spring.

ANTH 23000 - Gender Across Cultures

Credit Hours: 3.00. Explores gender and sexuality from a cross-cultural perspective. Draws on case studies to explore the

complexities of women's and men's lives. Examines gender hierarchies, gender in a globalized world, and the cultural construction of sexuality and gender. Typically offered Summer Fall Spring.

ANTH 34000 - Global Perspectives On Health

Credit Hours: 3.00. This course examines health issues and risks faced by individuals around the world, but especially in resource poor geographical areas. We will explore in-depth the gendered, ethnic, cultural, and class dimensions that underlie the patterning of disease and illness worldwide. Typically offered Fall Spring.

ANTH 37900 - Native American Cultures

Credit Hours: 3.00. General survey of Native cultures of the Americas. Topics to be covered include prehistory, language, religion, aesthetics, culture contact and change, contemporary issues, and social, economic and political organization. Typically offered Fall (and occasionally in the Spring).

ASAM 24000 - Introduction To Asian American Studies

Credit Hours: 3.00. A general introduction to Asian American history and culture, with a focus on the diverse and multifaceted experiences of peoples of Asian descent in America and their contributions to U.S. culture and society. Typically offered Spring.

ASAM 34000 - Contemporary Issues In Asian American Studies

Credit Hours: 3.00. Overviews various issues in contemporary Asian American Studies through theoretical and literary readings combined with examinations of popular media. Topics examine the multiple intersections of race, ethnicity, class, gender, and sexuality. Typically offered Spring.

ASL 28000 - American Deaf Community: Language, Culture, And Society

Credit Hours: 3.00. The linguistic, cultural, and societal context of the deaf community in America. Both historical and contemporary aspects of deaf identity will be included, with an emphasis on the central role that ASL plays in the lives of deaf individuals. Typically offered Spring.

CHNS 28000 - Topics in Chinese Civilization and Culture

Credit Hours: 3.00. Selected topics on Chinese civilization and culture including history and geography, Confucianism, contemporary China, education, family, international cultural and economic cooperation. Course materials also cover most current issues on and in Chinese-speaking communities. Lectures in English. Typically offered Fall Spring.

COM 22400 - Communicating In The Global Workplace

Credit Hours: 3.00. This introductory course explores communication issues that arise in the global workplace. The course develops an appreciation of the relationship among culture, communication, and ways of organizing and doing business. Typically offered Fall.

COM 30300 - Intercultural Communication

Credit Hours: 3.00. Study of the complex relationship between culture and communication in a variety of interpersonal, group, organizational, and computer-mediated settings. Application of theory and research to development of the knowledge, attitudes, and skills associated with intercultural communication competence. Typically offered Fall Spring.

COM 37600 - Communication And Gender

Credit Hours: 3.00. Course is based on the assumption that studies of gender and communication are intertwined. Focus is on communication processes that create symbols of gender and how those processes recreate the meanings of gender in the lives of individuals and groups. Typically offered Fall Spring.

COM 38100 - Gender And Feminist Studies In Communication

Credit Hours: 3.00. This course examines the ways in which communication constructs and maintains our conceptions of gender. It explores different approaches to the study of gender and feminist issues in public, organizational, and mass communication. Typically offered Fall Spring.

HDFS 28000 - Diversity In Individual And Family Life

Credit Hours: 3.00. Students are introduced to aspects of individual and family life in diverse cultures, particularly racially and/or ethnically diverse families in the United States. The nature of relationships between dominant and minority cultures is considered. Implications of diversity for practice with diverse populations are emphasized throughout the course. Typically offered Fall Spring Summer.

HIST 21000 - The Making Of Modern Africa

Credit Hours: 3.00. This course provides students with a comprehensive introduction to modern African history from 1800 to the present. Using a variety of films, novels and scholarly resources, we will examine the major historical forces that have shaped African lives over the last two centuries. Emphasis will be placed on African experiences of slavery, colonialism, liberation struggles, and post-independence national building. Students will also learn to analyze contemporary African issues within a larger historical context. Typically offered Fall Spring.

HIST 24000 - East Asia And Its Historic Tradition

Credit Hours: 3.00. Survey of the great historic traditions of China, Japan, and Korea from earliest times to approximately 1600, with special attention to state formation, society, intellectual, philosophical, and religious developments, and the visual, musical, and literary arts. Typically offered Fall.

HIST 24100 - East Asia In The Modern World

Credit Hours: 3.00. The response of China, Japan, and Korea to the coming of the West in modern times, with special stress on the effect of Western ideas and machines. Approximately 1600 to the present. Typically offered Spring.

HIST 24300 - South Asian History And Civilizations

Credit Hours: 3.00. Survey history of India, Pakistan, and Bangladesh, from the origins of South Asian civilization to the present. Topics include ancient India, the Mughal Empire, the colonial experience, the independence movement, and conflict and popular culture. Typically offered Fall Spring.

HIST 24500 - Introduction To The Middle East History And Culture

Credit Hours: 3.00. A survey of the civilization of the Middle East from the rise of Islam to the present. The political, social, and cultural institutions are examined along with the problem of adjusting these to the pressure of Western civilization in the last two centuries. Typically offered Fall Spring.

HIST 24600 - Modern Middle East And North Africa

Credit Hours: 3.00. This course explores the political, social, and cultural factors that have contributed to the formation of the modern Middle East. Course includes short stories and a selection of documentary films from the region. Typically offered Summer Fall Spring.

HIST 27100 - Introduction To Colonial Latin American History (1492-1810)

Credit Hours: 3.00. The purpose of this general survey course is to introduce students to the principle historical themes of Latin America during the colonial period (roughly, from 1492 to 1810). No prior knowledge of Latin American history is required. Typically offered Fall Spring Summer.

HIST 27200 - Introduction To Modern Latin American History (1810 To The Present)

Credit Hours: 3.00. The purpose of this general survey course is to introduce students to the study of the major economic, political, social, and cultural processes that shaped modern Latin American nations since independence. No prior knowledge of Latin American history is required. Typically offered Fall Spring Summer.

HIST 34100 - History Of Africa South Of The Sahara

Credit Hours: 3.00. An introductory survey of major movements and problems in the development of the people of sub-Saharan Africa from the dawn of history to the mid-twentieth century. Attention is directed to the response of Africans to their environment and to various external challenges - Islam, European colonization, and the industrial revolution. Typically offered Fall Spring.

HIST 34200 - Africa And The West

Credit Hours: 3.00. The study of Africa's relations with Europe and the Americas, emphasizing economic and cultural crosscurrents from the period of the Atlantic slave trade to the rise of modern nationalism. Typically offered Fall Spring.

HIST 34400 - History Of Modern Japan

Credit Hours: 3.00. A survey of Japanese history from the nineteenth century to the present, including Japan's response to Western expansionism, the formation of the modern state, political parties, industrialization, the Pacific War, the American Occupation, the postwar "economic miracle," and Japan today. Typically offered Spring.

HIST 36600 - Hispanic Heritage Of The United States

Credit Hours: 3.00. Despite their numerical prominence, Hispanics have received relatively little attention in traditional U.S. history. Focusing primarily on Mexican-Americans, Cuban-Americans, and Puerto Ricans, this course offers a historical perspective on the Hispanic experience from colonial times to the present. Typically offered Fall Spring Summer.

HIST 37700 - History And Culture Of Native America

Credit Hours: 3.00. This course explores the societies of Native North America in a historical context, from pre-historic times to the present, examining Native world views and belief systems to understand their historical relations with each other, and with Europeans and their descendents. Typically offered Fall Spring.

JWST 33000 - Introduction To Jewish Studies

Credit Hours: 3.00. An interdisciplinary course touching on the full range of Jewish experience from antiquity to the present. Several members of the Jewish Studies faculty and guest lecturers participate, representing such fields as anthropology, history, language, literature, philosophy, politics, religion, and sociology. Typically offered Spring.

LALS 25000 - Introduction To Latin American And Latino Studies

Credit Hours: 3.00. Interdisciplinary and integrative presentation and examination of the historical, political, economic, and cultural processes of Latin America, from independence to the present followed by an analysis of scholarly works that include theoretical models, methodological strategies, and analytical approaches to learning about US Latinos. Special emphasis is placed on the immigrant experience and its role in the incorporation of Latinos into the US society. Typically offered Fall.

PHIL 11100 - Ethics

Credit Hours: 3.00. A study of the nature of moral value and obligation. Topics such as the following will be considered: different conceptions of the good life and standards of right conduct; the relation of nonmoral and moral goodness; determinism, free will, and the problem of moral responsibility; the political and social dimensions of ethics; the principles and methods of moral judgment. Readings will be drawn both from contemporary sources and from the works of such philosophers as Plato, Aristotle, Aquinas, Butler, Hume, Kant, and J. S. Mill. Typically offered Summer Fall Spring. CTL:ISH 1051 Ethics

PHIL 22500 - Philosophy And Gender

Credit Hours: 3.00. An examination of the beliefs, assumptions, and values found in traditional and contemporary philosophical analyses of women. A range of feminist approaches to knowledge, values, and social issues will be introduced. Typically offered Fall Spring.

PHIL 24200 - Philosophy, Culture, And The African American Experience

Credit Hours: 3.00. The purpose of this course is to consider African American based or inspired conceptions of Western philosophy and new visions of what it is to do philosophy sensitive to culturally rooted diversity. Typically offered Fall Spring.

PHIL 26000 - Philosophy And Law

Credit Hours: 3.00. A discussion of philosophical issues in the law: a critical examination of such basic concepts in law as property, civil liberty, punishment, right, contract, crime and responsibility; and a survey of some main philosophical theories about the nature and justification of legal systems. Readings will be drawn from both law and philosophy. Typically offered Fall Spring.

PHIL 27000 - Biomedical Ethics

Credit Hours: 3.00. An examination of the moral problems raised by developments in medicine and the biomedical sciences. Topics include abortion, reproductive technologies, euthanasia and physician-assisted suicide, experiments involving human subjects, and health care delivery. Typically offered Fall Spring.

PHIL 28000 - Ethics And Animals

Credit Hours: 3.00. An exploration through the study of major historical and contemporary philosophical writings of basic moral issues as they apply to our treatment of animals. Rational understanding of the general philosophical problems raised by practices such as experimentation on animals or meat-eating will be emphasized. Typically offered Fall Spring.

PHIL 29000 - Environmental Ethics

Credit Hours: 3.00. An introduction to philosophical issues surrounding debates about the environment and our treatment of it. Topics may include endangered species, "deep ecology," the scope and limits of cost-benefit analyses, and duties to future generations. Typically offered Fall Spring.

POL 22200 - Women, Politics, And Public Policy

Credit Hours: 3.00. An introduction to women's participation in politics, with an emphasis on America. Structural and attitudinal conditions limiting women's political roles and contemporary efforts to change women's status in society through politics. Typically offered Summer Fall Spring.

PSY 23900 - The Psychology Of Women

Credit Hours: 3.00. The purpose of the course is to provide an overview of the psychology of women. Topics include stereotyping, women and achievement, aggression and power, the psychological concept of androgyny, and attitudes toward feminism. Typically offered Summer Fall Spring.

PSY 33500 - Stereotyping And Prejudice

Credit Hours: 3.00. This course examines the topics of stereotyping, prejudice, and discrimination from a social psychological perspective. Relying on empirical findings and relevant theoretical approaches, the course moves beyond lay opinions to explore the social psychological foundations and forms of stereotyping and prejudice, and to examine various strategies for reducing intergroup biases. Typically offered Fall Spring.

PSY 36800 - Children's Development In Cross-Cultural Perspective

Credit Hours: 3.00. Surveys the development of children from different cultures. Topics include: Studying the development of children from other cultures, cultural similarities and differences in children's development, what leads to cultural differences in development, implications for children of clashes in cultural values. Typically offered Fall Spring.

SOC 31000 - Racial And Ethnic Diversity

Credit Hours: 3.00. Examines racial and ethnic pluralism in America: ways groups have entered our society; their social and cultural characteristics; and their relationships with other groups. Groups include the English, Germans, Irish, Jews, Chinese, Japanese, Blacks, Hispanics, and Native Americans. Typically offered Fall.

SOC 33900 - Introduction To The Sociology Of Developing Nations

Credit Hours: 3.00. Analysis of the causes of development in the Third World. Topics include: the food crisis; population growth; poverty and inequality; industrialization, including the role of multinational corporations; debt; and the International Monetary Fund. Regional differences in patterns and causes analyzed. Typically offered Fall Spring.

SOC 45000 - Gender Roles In Modern Society

Credit Hours: 3.00. A critical examination of the complementary roles of men and women, with particular attention to problems of role adjustment in the contemporary United States. The neofeminist movement and countermovements. Role conflicts and adjustments in such areas as family, education, employment, and the political arena. Typically offered Fall Spring.

- Study Abroad Course upon approval of HK department

Leadership/Policy Selective List - 3 credits

CSR 30900 - Leadership Strategies

Credit Hours: 3.00. Provides knowledge of humanistic processes that contribute to development of effective leadership. Typically offered Spring.

POL 12000 - Introduction To Public Policy And Public Administration

Credit Hours: 3.00. An introduction to the fields of public policy and public administration. Processes of policy formation and administration are examined. Different approaches to evaluating and improving public policies are discussed. Typically offered Summer Fall Spring.

POL 22300 - Introduction To Environmental Policy

Credit Hours: 3.00. (FNR 22310) Study of decision making as modern societies attempt to cope with environmental and natural resources problems. Focuses on the American political system, with some attention to the international dimension. Current policies and issues will be examined. Typically offered Fall Spring.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

OLS 28400 - Leadership Principles

Credit Hours: 3.00. Mastery of the basic knowledge managers need to effectively lead individual employees. Includes primary measures of performance success, leadership strategies, core leadership actions, and a comprehensive theory that explains how the strategies and actions cause positive attitudes and increased performance. Typically offered Summer Fall Spring.

TLI 11100 - Gateway To Technology Leadership And Innovation

Credit Hours: 3.00. This course serves as an introduction to the Technology Leadership (TLI) programs. Students study the interface between technology and people, while developing strategies to lead, innovate, and solve problems in a technology-rich, systems environment. Concepts of globalization, ethical practices, and life-long learning are also explored. Typically offered Fall Spring Summer.

TLI 11200 - Foundations Of Organizational Leadership

Credit Hours: 3.00. A survey of individual and organizational behavioral concepts and principles that provide a foundation for leadership in technology organizations. The focus will be toward the understanding of behaviors necessary for effective organizational leadership, including concepts of work in a technology-rich environment. Typically offered Fall Spring Summer.

TLI 15200 - Business Principles For Organizational Leadership

Credit Hours: 3.00. This course will introduce the topic of applied organization leadership in the context of working organizations. Topics include basic functions, structures, and operations of organizations, and an introduction to reading and understanding balance sheets, cash flow statements, and profit-loss statements. Typically offered Fall Spring Summer.

TLI 21300 - Project Management

Credit Hours: 3.00. Project management is an ad hoc technique for accomplishing specialized missions or work. Examples of projects include research and development studies, consulting projects, reorganizations efforts, implementation of total quality management, installation of new equipment, advertising campaigns, construction or other one-time efforts. This course will

provide a leadership approach to project management, including team development and team selection. Typically offered Fall Spring Summer.

TLI 25300 - Principles Of Technology Strategy

Credit Hours: 3.00. This course explores technological strategy and the innovation process from an organizational perspective. The evolutionary path of technologies is dependent upon a variety of factors that when understood can lead to sound technology leadership practices. These factors include innovative organizational processes, economic enablers, and public policies. Students will explore these factors and their interrelationships with attention to how they contribute to practices such as technological evaluation, assessment, planning, strategy, and forecasting. Typically offered Fall Spring Summer.

Psychology Selective List - 3 credits

PSY 22200 - Introduction To Behavioral Neuroscience

Credit Hours: 3.00. An introduction to how the nervous system controls behavior. Topics include evolution and comparative psychobiology, the neuroscience of sensation and perception, the neuroscience of motivation, neuropsychology, and cognitive neuroscience. Typically offered Fall Spring Summer.

PSY 24000 - Introduction To Social Psychology

Credit Hours: 3.00. Not open to students with credit in SOC 34000. A broad survey in current knowledge about human social behavior. Topics covered include aggression, attraction and love, social influence, attitudes and attitude change, nonverbal communication, leadership, prejudice and discrimination, and application of social psychology to law, medicine, and other fields. Typically offered Fall Spring Summer. CTL:ISH 1024 Social Psychology

PSY 25100 - Health Psychology

Credit Hours: 3.00. Health psychology is concerned with the interaction between behavior and health and illness. It includes the psychological study of the relationship between health and lifestyle, stress and coping, and health-injurious behaviors. Typically offered Summer Fall Spring.

PSY 27200 - Introduction To Industrial-Organizational Psychology

Credit Hours: 3.00. Survey of psychological principles and research methods relevant to organizations and industry. Topics covered include research methodology, individual differences, personnel selection, performance measurement, training, motivation, job satisfaction, emotions, work stress, and leadership. Typically offered Fall Spring Summer.

PSY 35000 - Abnormal Psychology

Credit Hours: 3.00. Various forms of mental disorders from the standpoint of their origin, treatment, prevention, social significance, and relation to problems of normal human adjustment. Typically offered Fall Spring Summer. CTL:ISH 1023
Abnormal Psychology

Sociology Selective List - 3 credits

SOC 22000 - Social Problems

Credit Hours: 3.00. Contemporary problems at the community, society, and international levels, focusing on patterns of social organization and social change in American society, with concentration on such topics as technological militarism and war, poverty, racism, political protest, and cybernation. Typically offered Fall Spring Summer. CTL:ISH 1061 Social Problems

SOC 31000 - Racial And Ethnic Diversity

Credit Hours: 3.00. Examines racial and ethnic pluralism in America: ways groups have entered our society; their social and cultural characteristics; and their relationships with other groups. Groups include the English, Germans, Irish, Jews, Chinese, Japanese, Blacks, Hispanics, and Native Americans. Typically offered Fall.

SOC 34000 - General Social Psychology

Credit Hours: 3.00. Social influences on the individual and processes of social interaction. Individual attitudes and behavior as related to socialization, social norms, social roles, communication and propaganda, and other social influences. Among the interaction processes considered are interpersonal attraction, influence, leadership, cooperation, and conflict. Not open to students with credit in PSY 24000. Typically offered Summer Fall Spring.

SOC 37400 - Medical Sociology

Credit Hours: 3.00. Provides an overview of the sociological determinants and consequences of health, the patient experience, health care providers, the organization of the health care system. Typically offered Fall Spring.

SOC 41100 - Social Stratification

Credit Hours: 3.00. Examination of systems of class and caste, with special attention to the United States; status, occupation, income, and other elements in stratification. Typically offered Spring.

Other Languages - 6 credits from one language

American Sign Language, Arabic, Chinese, French, German, Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Behavioral Social Sciences Concentration - BSSC

Intro Course Selective - 3 credits

ANTH 20300 - Biological Bases Of Human Social Behavior

Credit Hours: 3.00. This course is an introduction to human social behavior from the perspective of biological anthropology, with special emphasis on human evolution and non-human primates. Topics include aggression, communication, learning, maturation, sexuality, and the evolution of social systems. Typically offered Fall Spring.

ANTH 21200 - Culture, Food And Health

Credit Hours: 3.00. This course is designed to provide an introduction to the field of Medical Anthropology in which we will examine issues related to health and illness from various perspectives outside of the Western biomedical perspective. Typically offered Fall Spring.

ANTH 34000 - Global Perspectives On Health

Credit Hours: 3.00. This course examines health issues and risks faced by individuals around the world, but especially in resource poor geographical areas. We will explore in-depth the gendered, ethnic, cultural, and class dimensions that underlie the patterning of disease and illness worldwide. Typically offered Fall Spring.

BSSC Concentration Selectives - 12 credits

COM 57600 - Health Communication

Credit Hours: 3.00. Survey of health communication theory and research. Examines issues such as patient-provider and everyday communication, broader community-societal discourse, and organizational and mass health communication. Prepares participants for subsequent more specialized seminars and enriched study in allied specialties. Typically offered Fall Spring.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood

and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HDFS 32500 - Health And Health Care For Children And Families

Credit Hours: 3.00. This course discusses leading causes of child health problems as well as examines the child and family reactions and adjustment to illness and disability. A developmental perspective on coping with health problems from early childhood through adolescence is presented. An overview on global child health disparities is also addressed. Typically offered Fall Spring.

POL 30000 - Introduction To Political Analysis

Credit Hours: 3.00. An introduction to the study of politics, its basic concepts and major areas of concern; also review of important research techniques, including methods of data collection and analysis. Typically offered Summer Fall Spring.

POL 52400 - Public Policy And The Family

Credit Hours: 3.00. An intensive examination of the interrelationships between public policy making and the structure and quality of life of families. The primary focus is the United States, but consideration is given to family policies in other capitalist nations. Typically offered Fall Spring.

PSY 22200 - Introduction To Behavioral Neuroscience

Credit Hours: 3.00. An introduction to how the nervous system controls behavior. Topics include evolution and comparative psychobiology, the neuroscience of sensation and perception, the neuroscience of motivation, neuropsychology, and cognitive neuroscience. Typically offered Fall Spring Summer.

PSY 24000 - Introduction To Social Psychology

Credit Hours: 3.00. Not open to students with credit in SOC 34000. A broad survey in current knowledge about human social behavior. Topics covered include aggression, attraction and love, social influence, attitudes and attitude change, nonverbal communication, leadership, prejudice and discrimination, and application of social psychology to law, medicine, and other fields. Typically offered Fall Spring Summer. CTL:ISH 1024 Social Psychology

SOC 34000 - General Social Psychology

Credit Hours: 3.00. Social influences on the individual and processes of social interaction. Individual attitudes and behavior as related to socialization, social norms, social roles, communication and propaganda, and other social influences. Among the interaction processes considered are interpersonal attraction, influence, leadership, cooperation, and conflict. Not open to students with credit in PSY 24000. Typically offered Summer Fall Spring.

PSY 35000 - Abnormal Psychology

Credit Hours: 3.00. Various forms of mental disorders from the standpoint of their origin, treatment, prevention, social significance, and relation to problems of normal human adjustment. Typically offered Fall Spring Summer. CTL:ISH 1023 Abnormal Psychology

SOC 22000 - Social Problems

Credit Hours: 3.00. Contemporary problems at the community, society, and international levels, focusing on patterns of social organization and social change in American society, with concentration on such topics as technological militarism and war, poverty, racism, political protest, and cybernation. Typically offered Fall Spring Summer. CTL:ISH 1061 Social Problems

SOC 35200 - Drugs, Culture, And Society

Credit Hours: 3.00. (ANTH 35200) The course provides an overview of the social and cultural underpinnings of drug use across societies. Students engage with various topics, including addiction, global markets, drug epidemics, public policy, and cross-cultural differences in drug use. Typically offered Summer Fall Spring.

ANTH 35200 - Drugs, Culture, And Society

Credit Hours: 3.00. (SOC 35200) The course provides an overview of the social and cultural underpinnings of drug use across societies. Students engage with various topics, including addiction, global markets, drug epidemics, public policy, and cross-cultural differences in drug use. Typically offered Summer Fall Spring.

SOC 38200 - Introduction To Statistics In Sociology

Credit Hours: 3.00. Introduction to the basic techniques of statistical analysis applicable to sociological data. Elementary descriptive statistics and statistical inference. Introduction to multivariate analysis. Typically offered Fall Spring.

SOC 38300 - Introduction To Research Methods In Sociology

Credit Hours: 3.00. Introduction to the methods of data collection and analysis and to the use of the scientific method of social research. Formulation of hypotheses and research designs for their testing. Elementary principles for the conduct of experiments, observation and interviewing, documentation, content analysis, and surveys. Relationship between social research and social theory. Typically offered Fall Spring.

SOC 53100 - Community Organization

Credit Hours: 3.00. Analysis of the local community in terms of its institutional structure, relationships among institutions, political and economic power relationships, and the role of voluntary organizations and interest groups. Typically offered Fall.

SOC 57100 - Health And Social Behavior

Credit Hours: 3.00. A sociological examination of health and illness that emphasizes the patient and his or her relations to others. Considers the distribution of illness, stress, health and illness behavior, patient-practitioner relationships, and treatment modes. Typically offered Fall Spring.

SOC 57200 - Comparative Healthcare Systems

Credit Hours: 3.00. Using cost, quality, and access to care as core concepts, this course explores healthcare in comparative context. Special topics are health and gender, the environment, epidemics, long-term care, technology, and rationing, among others. Typically offered Fall Spring.

SOC 57300 - The Human Side Of Medicine

Credit Hours: 3.00. Focuses on sociological theory and research related to social conflicts over the delivery of healthcare in the U.S. Considers social issues pertaining to abortion, AIDS, human experimentation, reproductive technologies, euthanasia, and others. Typically offered Fall Spring.

SOC 57600 - Health And Aging In Social Context

Credit Hours: 3.00. Analysis of the social and cultural influences on health in adulthood and later life. Considers distribution of illness among older adults, health behavior, and health services use, including long-term care. Typically offered Fall Spring.

TLI 11200 - Foundations Of Organizational Leadership

Credit Hours: 3.00. A survey of individual and organizational behavioral concepts and principles that provide a foundation for leadership in technology organizations. The focus will be toward the understanding of behaviors necessary for effective organizational leadership, including concepts of work in a technology-rich environment. Typically offered Fall Spring Summer.

TLI 25400 - Leading Change In Technology Organizations

Credit Hours: 3.00. This course provides a framework for creating, monitoring, and leading change within technology-rich organizations. Students will learn how to be change consultants, diagnose organizational problems, identify and implement change interventions at various outcome levels (i.e. individual, group, process, and the organization as a whole), and evaluate the success of change efforts. Typically offered Fall Spring Summer.

Biostatistics/Communications & Informatics/Systems Thinking Concentration - BCIS

BCIS Concentration Selectives - 15 credits

CNIT 45800 - Biomedical Informatics

Credit Hours: 3.00. This course explores the tools and objectives of research in the medical and life sciences industry relevant to the skills of information technology. The driving outcome of this course is for students to understand the domain demands inherent to information systems in healthcare, bioinformatics and computational life sciences, with respect to their role in commercialism, therapeutic decision support and discovery support systems. Topics include information technology application in support of health care delivery, a brief overview of healthcare delivery, the history of healthcare informatics, an overview of the state of current systems and the professional opportunities in Health Informatics. In bioinformatics, introduce the concepts of genomics and proteomics, biotechnology, biological databases and file structures, common computational methods for exploiting biological databases, integrating computational methods within the life sciences industry, and a survey of successful computational life science applications. Typically offered Fall Spring Summer.

COM 25300 - Introduction To Public Relations

Credit Hours: 3.00. An analysis of public relations theory and practice from their origins to the present. From a communication perspective, the course examines public relations environments, audiences, and message strategies. Typically offered Fall Spring Summer.

COM 31500 - Speech Communication Of Technical Information

Credit Hours: 3.00. The organization and presentation of information of a practical technical nature. Emphasis is placed upon the study, preparation, and use of audiovisual materials in such presentations. Typically offered Fall Spring Summer.

COM 41500 - Discussion Of Technical Problems

Credit Hours: 3.00. Principles of speech communication related to interpersonal and group discussions on technical topics and problems; practice in using these modes in situations typically encountered by technologists. Typically offered Fall Spring.

COM 43500 - Communication And Emerging Technologies

Credit Hours: 3.00. Both historical and contemporary perspectives of the reciprocal influence of new and changing technologies and the processes and practices of communication. The impact of print, telegraph, telephone, radio, and television will be surveyed, along with cable systems, direct broadcast satellites, and videotext. Typically offered Fall Spring Summer.

IT 44600 - Six Sigma Quality

Credit Hours: 3.00. A study of the six sigma quality and process improvement methodology, using the define, measure, analyze, improve, and control (DMAIC) process. The course addresses advanced topics in statistical quality as they pertain to the six sigma methodology and provides preparation for the Green Belt Certification exam. Typically offered Fall Spring Summer.

MET 52700 - Technology From A Global Perspective

Credit Hours: 3.00. Introduction to the challenges faced by the practicing technologist when working and interacting with international technical personnel, both here and abroad, including history, standards, education, and practice of technology outside the United States. Typically offered Fall.

NUR 52500 - Informatics In Nursing

Credit Hours: 3.00. Integrates nursing science with computer technology and information science to identify, gather, and manage information. Emphasis on technology based health applications with support clinical, administrative, research, and educational decision making enhancing the efficacy of nursing endeavors. Typically offered Summer Fall Spring.

PSY 27200 - Introduction To Industrial-Organizational Psychology

Credit Hours: 3.00. Survey of psychological principles and research methods relevant to organizations and industry. Topics covered include research methodology, individual differences, personnel selection, performance measurement, training, motivation, job satisfaction, emotions, work stress, and leadership. Typically offered Fall Spring Summer.

SOC 38200 - Introduction To Statistics In Sociology

Credit Hours: 3.00. Introduction to the basic techniques of statistical analysis applicable to sociological data. Elementary descriptive statistics and statistical inference. Introduction to multivariate analysis. Typically offered Fall Spring.

SOC 38300 - Introduction To Research Methods In Sociology

Credit Hours: 3.00. Introduction to the methods of data collection and analysis and to the use of the scientific method of social research. Formulation of hypotheses and research designs for their testing. Elementary principles for the conduct of experiments, observation and interviewing, documentation, content analysis, and surveys. Relationship between social research and social theory. Typically offered Fall Spring.

SOC 57200 - Comparative Healthcare Systems

Credit Hours: 3.00. Using cost, quality, and access to care as core concepts, this course explores healthcare in comparative context. Special topics are health and gender, the environment, epidemics, long-term care, technology, and rationing, among others. Typically offered Fall Spring.

STAT 49000 - Topics In Statistics For Undergraduates

Credit Hours: 1.00 to 5.00. Supervised reading course or special topics course at the senior level for undergraduates are given under this number. Permission of instructor required. Typically offered Fall Spring Summer.

TLI 23500 - Introduction To Lean And Sustainable Systems

Credit Hours: 3.00. This course provides the foundation for technology systems processes and practices. The content covers the discussion of current systems issues, basic systems technology processes, and the role of systems engineering professionals in a global business environment. Topics include basic principles of systems thinking, the concepts of performance and cost measures, alternative design concepts, lean processes, and sustainable life-cycle management. Typically offered Fall Spring Summer.

TLI 25300 - Principles Of Technology Strategy

Credit Hours: 3.00. This course explores technological strategy and the innovation process from an organizational perspective. The evolutionary path of technologies is dependent upon a variety of factors that when understood can lead to sound technology leadership practices. These factors include innovative organizational processes, economic enablers, and public policies. Students will explore these factors and their interrelationships with attention to how they contribute to practices such as technological evaluation, assessment, planning, strategy, and forecasting. Typically offered Fall Spring Summer.

TLI 25400 - Leading Change In Technology Organizations

Credit Hours: 3.00. This course provides a framework for creating, monitoring, and leading change within technology-rich organizations. Students will learn how to be change consultants, diagnose organizational problems, identify and implement change interventions at various outcome levels (i.e. individual, group, process, and the organization as a whole), and evaluate the success of change efforts. Typically offered Fall Spring Summer.

Environmental Health/Epidemiology/Public Health Biology Concentration - EHEP

EHEP Concentration Selectives - 12 credits

AGEC 20400 - Introduction To Resource Economics And Environmental Policy

Credit Hours: 3.00. The course provides an overview of microeconomic theory and its application to issues related to evaluating resource economic issues and environmental policy. Topics discussed include efficiency, sustainability, valuation, externalities, governmental policies, and benefit cost analysis. Typically offered Spring.

AGEC 52500 - Environmental Policy Analysis

Credit Hours: 3.00. Designed to assist in understanding how environmental information and knowledge are produced, disseminated, and utilized in a variety of institutional contexts. Readings are selected to promote discussion and interaction concerning alternative mechanisms for protecting environmental resources. Prerequisite: introductory microeconomics course suggested. Typically offered Spring.

AGRY 29000 - Introduction To Environmental Science

Credit Hours: 3.00. (NRES 29000, EAPS 11300) An introduction to environmental science, including issues such as air and water pollution, toxic waste disposal, soil erosion, natural hazards, climate change, energy resources, and environmental planning. Includes extensive in-class discussion of case studies. Typically offered Fall.

NRES 29000 - Introduction To Environmental Science

Credit Hours: 3.00. (EAPS 11300, AGRY 29000) An introduction to environmental science, including issues such as air and water pollution, toxic waste disposal, soil erosion, natural hazards, climate change, energy resources, and environmental planning. Includes extensive in-class discussion of case studies. Typically offered Fall.

EAPS 11300 - Introduction To Environmental Science

Credit Hours: 3.00. (NRES 29000, AGRY 29000) An introduction to environmental science, including issues such as climate change, energy resources, air and water pollution, toxic waste disposal, soil erosion, natural hazards, and environmental planning. Includes extensive in-class discussion of case studies. Typically offered Fall.

AGRY 32000 - Genetics

Credit Hours: 3.00. The transmission of heritable traits; probability; genotypic-environmental interactions; chromosomal aberrations; polyploidy; gene mutations; genes in populations; the structure and function of nucleic acids; biochemical genetics; molecular genetics; coding. Typically offered Fall Spring.

ANTH 32700 - Environment And Culture

Credit Hours: 3.00. This course provides a general overview to the field of environmental anthropology, and surveys key

methods, and theories that anthropologists use to interpret human-environment interactions. Topics include culture ecology, agroecology, ethnobiology, political ecology, and environmental justice. Typically offered Summer, Fall, or Spring.

ASM 33600 - Environmental Systems Management

Credit Hours: 3.00. Analysis of environmental systems with special emphasis on non-urban and agribusiness needs. Technological and sociological solutions to environmental problems. Computer-based tools are used to analyze global environmental issues, chemical use and management, waste disposal and management, water and air quality, soil and water conservation, sustainable agriculture, regulatory and policy issues. Typically offered Fall.

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

BIOL 24100 - Biology IV: Genetics And Molecular Biology

Credit Hours: 3.00. An introduction to the principles of classical genetics and to molecular genetics. Topics covered are transmission of the genetic material (both in eukaryotes and prokaryotes); changes in the genetic material, structure, and function of the genetic material; and the manipulation of genetic material (recombinant DNA technology). Typically offered Spring.

BIOL 48300 - Great Issues: Environmental And Conservation Biology

Credit Hours: 3.00. Concerned with the application of ecological principles to environmental issues, the course introduces fundamental ecology, emphasizing the interplay of theoretical models, natural history, and experimentation. New research developments are stressed, with the outlook for application to environmental management and restoration. Whole-biosphere issues, such as the loss of biological diversity, frame a focus at the population level to understand local and global extinction and community stability. In-depth case studies of endangered ecosystems (both temperate and tropical), with computer modeling, field trips, and discussions of policy formulation, demonstrate the range of tools and information necessary to accomplish coexistence of humans with the rest of nature. Typically offered Fall.

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701= CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

FNR 48800 - Global Environmental Issues

Credit Hours: 3.00. Examination of the state of the world in terms of natural resource consumption, environmental quality, and global change. Techniques to analyze and evaluate information. Survey threats to soil productivity, the changing atmosphere, water quality and quantity, energy impacts, and biodiversity from an ecosystem perspective. Typically offered Fall.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 34500 - Introduction To Occupational And Environmental Health Sciences

Credit Hours: 3.00. Principles of occupational health (industrial hygiene) and environmental health as related to anticipation, recognition, evaluation, and control of hazards in the workplace and the surrounding community. Emphasis is on hazards of chemicals and their role in occupationally and environmentally related diseases. Historical basis and current legislation are discussed. In addition, the principles of epidemiology, toxicology, exposure standards, and respiratory protection are addressed. Typically offered Fall.

PHIL 27000 - Biomedical Ethics

Credit Hours: 3.00. An examination of the moral problems raised by developments in medicine and the biomedical sciences. Topics include abortion, reproductive technologies, euthanasia and physician-assisted suicide, experiments involving human subjects, and health care delivery. Typically offered Fall Spring.

PHIL 29000 - Environmental Ethics

Credit Hours: 3.00. An introduction to philosophical issues surrounding debates about the environment and our treatment of it. Topics may include endangered species, "deep ecology," the scope and limits of cost-benefit analyses, and duties to future generations. Typically offered Fall Spring.

POL 22300 - Introduction To Environmental Policy

Credit Hours: 3.00. (FNR 22310) Study of decision making as modern societies attempt to cope with environmental and natural resources problems. Focuses on the American political system, with some attention to the international dimension. Current policies and issues will be examined. Typically offered Fall Spring.

POL 42300 - International Environmental Policy

Credit Hours: 3.00. Environmental policy development in the international arena, with attention to international law, international organizations, and transboundary environmental problems. Typically offered Fall Spring Summer.

PSY 42200 - Genes and Behavior

Credit Hours: 3.00. An examination of genetic influences on behavior, including the mechanisms of genetic influence, methods of gene manipulation, and the role of genes in development and evolution. Genetic influences on mental illness, learning, memory, and intelligence are considered. Typically offered Fall Spring.

SOC 37400 - Medical Sociology

Credit Hours: 3.00. Provides an overview of the sociological determinants and consequences of health, the patient experience, health care providers, the organization of the health care system. Typically offered Fall Spring.

SOC 57200 - Comparative Healthcare Systems

Credit Hours: 3.00. Using cost, quality, and access to care as core concepts, this course explores healthcare in comparative context. Special topics are health and gender, the environment, epidemics, long-term care, technology, and rationing, among others. Typically offered Fall Spring.

Health Policy & Management Concentration - HPMG

HPMG Concentration Selectives - 12 credits

COM 22400 - Communicating In The Global Workplace

Credit Hours: 3.00. This introductory course explores communication issues that arise in the global workplace. The course develops an appreciation of the relationship among culture, communication, and ways of organizing and doing business. Typically offered Fall.

COM 25300 - Introduction To Public Relations

Credit Hours: 3.00. An analysis of public relations theory and practice from their origins to the present. From a communication perspective, the course examines public relations environments, audiences, and message strategies. Typically offered Fall Spring Summer.

COM 32000 - Small Group Communication

Credit Hours: 3.00. A study of group thinking and problem-solving methods; participation in, and evaluation of, committee, and informal discussion groups. Focus on the roles, networks, and messages employed by small group communicators. Typically offered Fall Spring Summer.

COM 32400 - Introduction To Organizational Communication

Credit Hours: 3.00. An introduction to fundamental concepts and basic research related to communication behavior in organizational settings. Units cover message processing, leadership communication, communication climates, communication training, and communication audits. Students participate in an organizational simulation in some sections. Typically offered Summer Fall Spring.

COM 32800 - Diversity At Work: A Rhetorical Approach

Credit Hours: 3.00. Introduces students to theories and experiences related to issues dealing with both diversity in the workplace and diversity at work to change or influence the world. Typically offered Fall.

COM 37500 - Conflict And Negotiation

Credit Hours: 3.00. This course surveys theory and research focused on the role of communication in conflict and negotiation, and helps students develop skills needed to manage conflict effectively in their personal and professional relationships. Typically offered Fall Spring.

COM 41900 - Judgment And Decision Making

Credit Hours: 3.00. This course is designed to foster an understanding, critique and analysis on issues related to judgment and decision processes. Permission of instructor required. Typically offered Fall Spring Summer.

CSR 30900 - Leadership Strategies

Credit Hours: 3.00. Provides knowledge of humanistic processes that contribute to development of effective leadership. Typically offered Spring.

CSR 33100 - Consumer Behavior

Credit Hours: 3.00. An interdisciplinary survey of consumer behavior theory focused on psychological, sociological, and cultural influences on consumer choice and use of products and services. Credit will not be given for both CSR 33100 and PSY 28500. Typically offered Fall Spring.

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

ECON 25200 - Macroeconomics

Credit Hours: 3.00. Introduction to macroeconomic theory. The course develops a theoretical framework permitting an analysis of the forces affecting national income, employment, interest rates, and the rate of inflation. Emphasis is placed upon the role of government fiscal and monetary policy in promoting economic growth and stable prices. Typically offered Fall Spring Summer. CTL:ISH 1041 Macroeconomics

MGMT 20000 - Introductory Accounting

Credit Hours: 3.00. The objectives of the course are to help students: (1) understand what is in financial statements and what the statements say about a business, (2) identify the business activities that caused the amounts that appear in the statements, and (3) understand how, when, and at what amount the effects of manager and employee actions will appear in the statements. Typically offered Fall Spring Summer. CTL:IPO 1801 Accounting I

MGMT 20100 - Management Accounting I

Credit Hours: 3.00. An introduction to management's internal use of accounting information--for decision making, production management, product costing, motivating and evaluating performance, and budgeting. Typically offered Fall Spring Summer. CCN:IPO 1802 Accounting II

MGMT 30400 - Introduction To Financial Management

Credit Hours: 3.00. Introductory course providing a foundation in corporate finance and covering topics such as: discounted cash flow valuation, bond valuation, equity valuation, option valuation, factors influencing a firm's cost of capital, and international finance issues. Typically offered Fall Spring.

MGMT 32300 - Principles Of Marketing

Credit Hours: 3.00. This mixed lecture and case course provides an overview of the functional area of marketing. The course is taught from a managerial perspective; it focuses on inputs to the marketing decision-making process, the process itself, and its results. No credit for students in the School of Management, except economics majors. Typically offered Fall Spring.

MGMT 44301 - Management Of Human Resources

Credit Hours: 3.00. Survey of theory and techniques used in human resource management within organizations. Emphasis is placed on legal concerns, human resource staffing and development, reward systems, and the role of unions in American society. Techniques studied include job analysis, the use of various recruitment and selection procedures, compensation, administration, and collective bargaining. No credit for students in the School of Management. Typically offered Fall Spring.

MGMT 45500 - Legal Background For Business I

Credit Hours: 3.00. The nature and place of law in our society, national and international, social and moral bases of law enactment, regulation of business, legal liability, and enforcement procedures. Special emphasis on torts, contracts, and agency. No credit to students in the School of Management. Typically offered Fall Spring Summer.

OLS 38800 - Leadership Through Teams

Credit Hours: 3.00. The group process, team development and exploration of dynamics that impact group and team performance. Typically offered Summer Fall Spring.

POL 30000 - Introduction To Political Analysis

Credit Hours: 3.00. An introduction to the study of politics, its basic concepts and major areas of concern; also review of important research techniques, including methods of data collection and analysis. Typically offered Summer Fall Spring.

POL 52400 - Public Policy And The Family

Credit Hours: 3.00. An intensive examination of the interrelationships between public policy making and the structure and quality of life of families. The primary focus is the United States, but consideration is given to family policies in other capitalist nations. Typically offered Fall Spring.

PSY 27200 - Introduction To Industrial-Organizational Psychology

Credit Hours: 3.00. Survey of psychological principles and research methods relevant to organizations and industry. Topics covered include research methodology, individual differences, personnel selection, performance measurement, training, motivation, job satisfaction, emotions, work stress, and leadership. Typically offered Fall Spring Summer.

SOC 22000 - Social Problems

Credit Hours: 3.00. Contemporary problems at the community, society, and international levels, focusing on patterns of social organization and social change in American society, with concentration on such topics as technological militarism and war, poverty, racism, political protest, and cybernation. Typically offered Fall Spring Summer. CTL:ISH 1061 Social Problems

SOC 37400 - Medical Sociology

Credit Hours: 3.00. Provides an overview of the sociological determinants and consequences of health, the patient experience, health care providers, the organization of the health care system. Typically offered Fall Spring.

SOC 53100 - Community Organization

Credit Hours: 3.00. Analysis of the local community in terms of its institutional structure, relationships among institutions, political and economic power relationships, and the role of voluntary organizations and interest groups. Typically offered Fall.

SOC 57200 - Comparative Healthcare Systems

Credit Hours: 3.00. Using cost, quality, and access to care as core concepts, this course explores healthcare in comparative context. Special topics are health and gender, the environment, epidemics, long-term care, technology, and rationing, among others. Typically offered Fall Spring.

SOC 57300 - The Human Side Of Medicine

Credit Hours: 3.00. Focuses on sociological theory and research related to social conflicts over the delivery of healthcare in the U.S. Considers social issues pertaining to abortion, AIDS, human experimentation, reproductive technologies, euthanasia, and others. Typically offered Fall Spring.

SOC 57400 - The Social Organization Of Healthcare

Credit Hours: 3.00. Analysis of the determinants and consequences of the social organization of medical care. Considers morbidity and mortality, costs and utilization of medical services, healthcare occupations and institutions, and change in programs and policies. Typically offered Fall Spring.

SOC 57600 - Health And Aging In Social Context

Credit Hours: 3.00. Analysis of the social and cultural influences on health in adulthood and later life. Considers distribution of illness among older adults, health behavior, and health services use, including long-term care. Typically offered Fall Spring.

TLI 15200 - Business Principles For Organizational Leadership

Credit Hours: 3.00. This course will introduce the topic of applied organization leadership in the context of working organizations. Topics include basic functions, structures, and operations of organizations, and an introduction to reading and understanding balance sheets, cash flow statements, and profit-loss statements. Typically offered Fall Spring Summer.

TLI 21300 - Project Management

Credit Hours: 3.00. Project management is an ad hoc technique for accomplishing specialized missions or work. Examples of projects include research and development studies, consulting projects, reorganizations efforts, implementation of total quality management, installation of new equipment, advertising campaigns, construction or other one-time efforts. This course will provide a leadership approach to project management, including team development and team selection. Typically offered Fall Spring Summer.

TLI 25400 - Leading Change In Technology Organizations

Credit Hours: 3.00. This course provides a framework for creating, monitoring, and leading change within technology-rich organizations. Students will learn how to be change consultants, diagnose organizational problems, identify and implement change interventions at various outcome levels (i.e. individual, group, process, and the organization as a whole), and evaluate the success of change efforts. Typically offered Fall Spring Summer.

Global Health Concentration - GHLH

Intro Course Selective - 3 credits

ANTH 20500 - Human Cultural Diversity

Credit Hours: 3.00. Using concepts and models of cultural anthropology, this course will survey the principal cultural types of the world and their distribution, and will undertake a detailed analysis of societies representative of each type. Typically offered Fall Spring.

ANTH 34000 - Global Perspectives On Health

Credit Hours: 3.00. This course examines health issues and risks faced by individuals around the world, but especially in resource poor geographical areas. We will explore in-depth the gendered, ethnic, cultural, and class dimensions that underlie the patterning of disease and illness worldwide. Typically offered Fall Spring.

GHLH Concentration Selectives - 15 credits

AAS 37100 - The African American Experience

Credit Hours: 3.00. Focus on specific topics of the personal experiences of blacks, in Africa and the diaspora, including black identity, black culture, and the relationships between blacks and society. Typically offered Fall.

AAS 37300 - Issues In African American Studies

Credit Hours: 3.00. Focuses on a specific topic that relates to selected issues in the life, history, and culture of peoples of African ancestry. Typically offered Fall Spring.

AGR 20100 - Communicating Across Culture

Credit Hours: 3.00. This course will provide students with an opportunity to understand their place in a multicultural, multiethnic, multinational country, the United States. It is designed to provide an academic overview of the field of multicultural education as it evolved to this day. The course will offer an introductory overview of the many differences that exist within all human beings. Because the diversity among individuals is endless, we cannot study all differences, but will study a sampling such as race, ethnicity, gender identity, age, social class, disability, learning styles, and religion/spiritual orientation. Issues of poverty, language, and social justice may also be examined in relationship to the above major areas of emphasis. Typically offered Fall Spring.

ANTH 21200 - Culture, Food And Health

Credit Hours: 3.00. This course is designed to provide an introduction to the field of Medical Anthropology in which we will examine issues related to health and illness from various perspectives outside of the Western biomedical perspective. Typically offered Fall Spring.

ANTH 33700 - Human Diet: Origins And Evolution

Credit Hours: 3.00. This course will survey humans evolving relationship with food over the last few million years; from our Pilo-pleistocene origins (foraging) through the origins of agriculture to modern industrial food production. Typically offered Fall Spring.

ANTH 35200 - Drugs, Culture, And Society

Credit Hours: 3.00. (SOC 35200) The course provides an overview of the social and cultural underpinnings of drug use across societies. Students engage with various topics, including addiction, global markets, drug epidemics, public policy, and cross-cultural differences in drug use. Typically offered Summer Fall Spring.

ANTH 48200 - Sexual Diversity In Global Perspectives

Credit Hours: 3.00. This course focuses on anthropological and interdisciplinary research in the study of sexuality with particular attention to lesbian, gay, bisexual and transgender identities. It explores historical, theoretical and ethnographic work on sexualities and genders in the US and globally. Typically offered Summer, Fall or Spring.

ASAM 24000 - Introduction To Asian American Studies

Credit Hours: 3.00. A general introduction to Asian American history and culture, with a focus on the diverse and multifaceted experiences of peoples of Asian descent in America and their contributions to U.S. culture and society. Typically offered Spring.

ASAM 34000 - Contemporary Issues In Asian American Studies

Credit Hours: 3.00. Overviews various issues in contemporary Asian American Studies through theoretical and literary readings combined with examinations of popular media. Topics examine the multiple intersections of race, ethnicity, class, gender, and sexuality. Typically offered Spring.

COM 22400 - Communicating In The Global Workplace

Credit Hours: 3.00. This introductory course explores communication issues that arise in the global workplace. The course develops an appreciation of the relationship among culture, communication, and ways of organizing and doing business. Typically offered Fall.

FNR 48800 - Global Environmental Issues

Credit Hours: 3.00. Examination of the state of the world in terms of natural resource consumption, environmental quality, and global change. Techniques to analyze and evaluate information. Survey threats to soil productivity, the changing atmosphere, water quality and quantity, energy impacts, and biodiversity from an ecosystem perspective. Typically offered Fall.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HDFS 30500 - Biosocial Foundations Of The Family

Credit Hours: 3.00. Family ties and family processes in the promotion of individual health and management of disease across the life course are covered. Course reviews research on families and health from multiple disciplinary perspectives. Typically offered Fall Spring.

HDFS 32500 - Health And Health Care For Children And Families

Credit Hours: 3.00. This course discusses leading causes of child health problems as well as examines the child and family reactions and adjustment to illness and disability. A developmental perspective on coping with health problems from early childhood through adolescence is presented. An overview on global child health disparities is also addressed. Typically offered Fall Spring.

HIST 30000 - Eve Of Destruction: Global Crises And World Organization In The 20th Century

Credit Hours: 3.00. Using a variety of case studies, this course considers 20th-century turning points -- often violent and disastrous ones -- in an emerging global conversation about urgent world problems and their possible solutions. Typically offered Summer Fall Spring.

IDIS 59100 - Selected Topics In Interdisciplinary Studies

Credit Hours: 3.00. A study of selected topics, taught by an instructor in whose particular field of specialization the content of the course falls. Typically offered Spring Fall Summer.

LALS 25000 - Introduction To Latin American And Latino Studies

Credit Hours: 3.00. Interdisciplinary and integrative presentation and examination of the historical, political, economic, and cultural processes of Latin America, from independence to the present followed by an analysis of scholarly works that include theoretical models, methodological strategies, and analytical approaches to learning about US Latinos. Special emphasis is placed on the immigrant experience and its role in the incorporation of Latinos into the US society. Typically offered Fall.

MET 52700 - Technology From A Global Perspective

Credit Hours: 3.00. Introduction to the challenges faced by the practicing technologist when working and interacting with international technical personnel, both here and abroad, including history, standards, education, and practice of technology outside the United States. Typically offered Fall.

PHIL 11400 - Global Moral Issues

Credit Hours: 3.00. A systematic and representative examination of significant contemporary moral problems with a focus on global issues such as international justice, poverty and foreign aid, nationalism and patriotism, just war, population and the environment, human rights, gender equality, and national self-determination. Typically offered Fall Spring Summer.

PSY 24000 - Introduction To Social Psychology

Credit Hours: 3.00. Not open to students with credit in SOC 34000. A broad survey in current knowledge about human social behavior. Topics covered include aggression, attraction and love, social influence, attitudes and attitude change, nonverbal communication, leadership, prejudice and discrimination, and application of social psychology to law, medicine, and other fields. Typically offered Fall Spring Summer. CTL:ISH 1024 Social Psychology

SOC 34000 - General Social Psychology

Credit Hours: 3.00. Social influences on the individual and processes of social interaction. Individual attitudes and behavior as related to socialization, social norms, social roles, communication and propaganda, and other social influences. Among the

interaction processes considered are interpersonal attraction, influence, leadership, cooperation, and conflict. Not open to students with credit in PSY 24000. Typically offered Summer Fall Spring.

PSY 33500 - Stereotyping And Prejudice

Credit Hours: 3.00. This course examines the topics of stereotyping, prejudice, and discrimination from a social psychological perspective. Relying on empirical findings and relevant theoretical approaches, the course moves beyond lay opinions to explore the social psychological foundations and forms of stereotyping and prejudice, and to examine various strategies for reducing intergroup biases. Typically offered Fall Spring.

SOC 31000 - Racial And Ethnic Diversity

Credit Hours: 3.00. Examines racial and ethnic pluralism in America: ways groups have entered our society; their social and cultural characteristics; and their relationships with other groups. Groups include the English, Germans, Irish, Jews, Chinese, Japanese, Blacks, Hispanics, and Native Americans. Typically offered Fall.

SOC 33800 - Global Social Movements

Credit Hours: 3.00. Explores dynamics of social movements in the world; emphasizes movements in non-western world. Examines emergences of movements, mobilization, tactical actions and consequences, and formal and informal organizations within movements to understand how international, national and local structures affect people. Typically offered Fall Spring.

SOC 33900 - Introduction To The Sociology Of Developing Nations

Credit Hours: 3.00. Analysis of the causes of development in the Third World. Topics include: the food crisis; population growth; poverty and inequality; industrialization, including the role of multinational corporations; debt; and the International Monetary Fund. Regional differences in patterns and causes analyzed. Typically offered Fall Spring.

SOC 38200 - Introduction To Statistics In Sociology

Credit Hours: 3.00. Introduction to the basic techniques of statistical analysis applicable to sociological data. Elementary descriptive statistics and statistical inference. Introduction to multivariate analysis. Typically offered Fall Spring.

SOC 57200 - Comparative Healthcare Systems

Credit Hours: 3.00. Using cost, quality, and access to care as core concepts, this course explores healthcare in comparative context. Special topics are health and gender, the environment, epidemics, long-term care, technology, and rationing, among others. Typically offered Fall Spring.

SOC 57400 - The Social Organization Of Healthcare

Credit Hours: 3.00. Analysis of the determinants and consequences of the social organization of medical care. Considers morbidity and mortality, costs and utilization of medical services, healthcare occupations and institutions, and change in programs and policies. Typically offered Fall Spring.

SOC 57600 - Health And Aging In Social Context

Credit Hours: 3.00. Analysis of the social and cultural influences on health in adulthood and later life. Considers distribution of illness among older adults, health behavior, and health services use, including long-term care. Typically offered Fall Spring.

Interdisciplinary Concentration - INTC (by approval only)

Intro Course Selectives - 6 credits

Course selections determined in consultation with Public Health faculty

INTC Concentration Selectives - 12 credits

Course selections determined in consultation with Public Health faculty

Note

¹ Behavioral Social Sciences Concentration

² Biostatistics/Communications & Informatics/Systems Thinking Concentration

³ Environmental Health/Epidemiology/Public Health Biology Concentration

⁴ Global Health Concentration

⁵ Health Policy & Management Concentration|

⁶ Leadership/Policy Selective

⁷ Psychology Selective

⁸ Sociology Selective

Program Requirements

<http://www.purdue.edu/hhs/hk/undergraduate/majors/>

Fall 1st Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

HK 13500 - Introduction To Health And Kinesiology

Credit Hours: 1.00. Overviews the disciplines of health and kinesiology. Students explore skills and academic interests in these areas. Describes career opportunities and options for graduate study. Provides strategies for professional and portfolio development. Students complete five hours of community service per semester. Typically offered Fall Spring.

MA 15300 - Algebra And Trigonometry I

Credit Hours: 3.00. Exponents and radicals; algebraic and fractional expressions. Equations and inequalities, systems of linear equations. Polynomial, exponential, and logarithmic functions. Not open to students with credit in MA 15900. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring Summer. CTL:IMA 1601 College Algebra

- Other Language 10100 - Credit Hours: 3.00 *

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

17 Credits

Spring 1st Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

- Other Language 10200 - Credit Hours: 3.00

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

16-17 Credits

Fall 2nd Year

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

- Culture & Diversity Selective - Credit Hours: 3.00

HK 21500 - Basic Public Health Studies

Credit Hours: 3.00. Examination of basic scientific concepts as applied to the problems and issues in selected areas of human health behavior with particular attention to their influence on population and individual health. Restricted to students enrolled in major degree programs for which this course is a requirement. Typically offered Fall Spring.

- Psychology Selective - Credit Hours: 3.00

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- Elective - Credit Hours: 3.00

18 Credits

Spring 2nd Year

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

- Concentration Intro Course - Credit Hours: 3.00 - 4.00

ENGL 42000 - Business Writing

Credit Hours: 3.00. Workplace writing in networked environments for management contexts. Emphasizes organizational context, project planning, document management, ethics, research, team writing. Typical genres include management memos, reports, letters, e-mail, resumes (print and online), oral presentations. Typically offered Summer Fall Spring.

ENGL 42100 - Technical Writing

Credit Hours: 3.00. Workplace writing in networked environments for technical contexts. Emphasizes context and user analysis, data analysis/display, project planning, document management, usability, ethics, research, team writing. Typical genres include technical reports, memos, documentation, Web sites. Typically offered Fall Spring Summer.

ENGL 42201 - Writing For The Health And Human Sciences

Credit Hours: 3.00. This course applies rhetorical principles to writing in health, hospitality, nutrition, nursing and related fields in the Health and Human Sciences. Typically offered Fall Spring Summer.

- Leadership/Policy Selective - Credit Hours: 3.00
- Sociology Selective - Credit Hours: 3.00 ♦
- Elective - Credit Hours: 0.00 - 2.00

15 - 18 Credits

Fall 3rd Year

- Concentration Intro/Selective Course - Credit Hours: 3.00 - 4.00

HK 26900 - Career Development And Preparation For The Health And Fitness Fields

Credit Hours: 1.00. Provides students with basic professional skills and materials for subsequent practicum experience and future employment search. Students will have secured a viable practicum site, complete with written job description/responsibilities, at the completion of the course. Typically offered Fall Spring.

HK 36600 - Health Behavior And Health Promotion

Credit Hours: 3.00. Introduces health behavior theory and practice in the context of health promotion and education. Examines individual, interpersonal, and community approaches to explaining and predicting health behavior and emphasizes their application to interventions in health promotion and education. Typically offered Fall Spring Summer.

HK 44000 - Human Diseases And Disorders

Credit Hours: 3.00. The major communicable and noncommunicable diseases and disorders that afflict modern man, with particular emphasis upon the etiology, epidemiology, and ecology of these diseases and disorders. Typically offered Fall Spring.

HK 44500 - Principles Of Epidemiology

Credit Hours: 3.00. The study of the distribution of diseases in human populations and factors that influence these distributions. Typically offered Fall Spring.

- Elective - Credit Hours: 3.00

16 - 17 Credits

Spring 3rd Year

- Concentration Selective - Credit Hours: 3.00

HK 38500 - Methods Of Health Promotion And Education

Credit Hours: 3.00. Methods and materials of health promotion and education; preparation and use of content and materials related to health concerns of target populations. A variety of strategies and media are covered with theoretical and practical applications. Typically offered Fall Spring.

HK 36500 - Principles Of Community Health Promotion

Credit Hours: 3.00. Provides an overview of community health promotion. Includes such topics as organization, financing, and delivery of personal health requirements for comprehensive health promotion. These include health care, health education, and health policy. Typically offered Fall.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

NUR 22201 - Population Health

Credit Hours: 2.00. A comprehensive introduction to population health concepts and practices through examination of philosophy, purpose, functions, activities and tools. Multiple determinants (genetics, cultural, social, and behavioral factors) that influence population health and illness are explored including the contribution of these factors to health disparities. Population-focused initiatives for health promotion and disease prevention are examined within the context of local to global public health systems. Typically offered Fall Spring Summer.

- Science, Technology, & Society - Credit Hours: 3.00 * or
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

17 Credits

Fall 4th Year

- Concentration Selective - Credit Hours: 3.00
- Concentration Selective - Credit Hours: 3.00
- Concentration Selective - Credit Hours: 3.00

HK 46500 - Research Methods

Credit Hours: 3.00. This course will be conducted in a lecture/lab format. The lectures will introduce the basic knowledge necessary to understanding the entire research process as it is found in health and kinesiology. The laboratories will be designed to give students practice in discovering research questions, preparing research proposals, evaluating existing research, and applying research to practical problems. Typically offered Fall Spring.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 0.00 - 3.00

15 - 18 Credits

Spring 4th Year

HK 49200 - Professional Work Experience IV

Credit Hours: 1.00. Practical experience in professional employment. Programs must be preplanned and conducted under direction of the departmental coordinator and agency supervisor. Students will submit documentaton of practical experiences. Permission of instructor required. Typically offered Fall Spring Summer.

1 Credit

Note: *Students typically do their internship during the summer after their third or fourth year. Doing so allows them to take coursework during this semester and lighter loads in previous semesters.*

Note

* Satisfies a University Foundational Learning Outcome

Students must earn a "C-" or higher in all required HK courses.

120 semester credits required for Bachelor of Science degree.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

School of Health Sciences

About Health Sciences

Undergraduate majors in Purdue's School of Health Sciences prepare students for fulfilling health-related careers. Our challenging curriculum offers a common core of courses in mathematics, physics, biology, and chemistry. Within Health Sciences students have the opportunity to participate in multiple health-related student organizations, gain real-world experience through internships, and conduct groundbreaking undergraduate research. Graduates from the School of Health Sciences have found excellent success in gaining employment and admission to professional school programs including medicine, dentistry, physical therapy (PT), occupational therapy (OT), optometry, public health, and physician assistant (PA).

Recent alumni of the School of Health Sciences work for a variety of companies including Google, Amazon.com, Johnson & Johnson, Subaru, Alcoa, Indiana State Department of Health, Purdue University, Indiana State Police, IU Health, St. Elizabeth Hospital, Lyondell Basell, and Flint Hills Resources. In 2013, approximately 70% of Health Sciences graduates enrolled in professional or graduate school programs.

Faculty

<http://www.purdue.edu/hhs/hsci/directory/faculty/index.html>

Contact Information

Purdue University
School of Health Sciences
550 Stadium Mall Drive
West Lafayette, IN 47907-2051
kwalker@purdue.edu
(765) 494-1419

Graduate Information

For Graduate Information please see Health Sciences Graduate Program Information.

Environmental Health Sciences, BSEH

About the Program

The quality and quantity of the air we breathe, the water we drink, the food we eat, and the environments where we live have a profound impact on our health and well-being. Environmental health professionals are involved with improving our understanding of how environmental agents may affect health in order to promote health and prevent disease. Areas of environmental health science include assessing exposure to environmental agents, understanding the relationships between exposure and disease, and translating this knowledge into science-based policy.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Environmental Health Sciences include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HENV-BS
ENHS
120 credits

Required Courses for Environmental Health Sciences (81 credits)

AGRY 29000 - Introduction To Environmental Science

Credit Hours: 3.00. (NRES 29000, EAPS 11300) An introduction to environmental science, including issues such as air and water pollution, toxic waste disposal, soil erosion, natural hazards, climate change, energy resources, and environmental planning. Includes extensive in-class discussion of case studies. Typically offered Fall.

NRES 29000 - Introduction To Environmental Science

Credit Hours: 3.00. (EAPS 11300, AGRY 29000) An introduction to environmental science, including issues such as air and water pollution, toxic waste disposal, soil erosion, natural hazards, climate change, energy resources, and environmental planning. Includes extensive in-class discussion of case studies. Typically offered Fall.

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

CE 35000 - Introduction To Environmental And Ecological Engineering

Credit Hours: 3.00. Introduction to water pollution, air pollution, noise, hazardous and solid wastes, and their control. Environmental impact statements and global pollution issues. Field trips required. Typically offered Fall Spring Summer.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory

thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 32100 - Analytical Chemistry I

Credit Hours: 4.00. Quantitative measurements on complex chemical systems that show matrix effects or require isolation of a component prior to its determination; general approaches to quantitative problems at the trace level; critical comparisons of competitive procedures with emphasis on principles of separation processes, including chromatography; recognition and evaluation of possible sources of error; approaches for optimizing conditions so as to minimize time and/or effort required to attain prescribed levels of accuracy and precision. Required of students majoring in chemistry. Typically offered Fall.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

- English Selective - select from list - Credit Hours: 3.00
- Environmental Policy Selective - select from HSCI list - Credit Hours: 3.00

HK 44500 - Principles Of Epidemiology

Credit Hours: 3.00. The study of the distribution of diseases in human populations and factors that influence these distributions. Typically offered Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the

clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 34500 - Introduction To Occupational And Environmental Health Sciences

Credit Hours: 3.00. Principles of occupational health (industrial hygiene) and environmental health as related to anticipation, recognition, evaluation, and control of hazards in the workplace and the surrounding community. Emphasis is on hazards of chemicals and their role in occupationally and environmentally related diseases. Historical basis and current legislation are discussed. In addition, the principles of epidemiology, toxicology, exposure standards, and respiratory protection are addressed. Typically offered Fall.

HSCI 56000 - Toxicology

Credit Hours: 3.00. (MCMP 56000) Introduction to general principles of toxicology, target organ toxicity, and safety evaluation. Covers toxicity of metals, solvents, pesticides, gases, dusts, and food additives. Typically offered Fall.

- HSCI Humanities, Behavior/Social Sciences Selective - select from HSCI list - Credit Hours: 3.00

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Required Courses in Other Departments (23-24 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

POL 22300 - Introduction To Environmental Policy

Credit Hours: 3.00. (FNR 22310) Study of decision making as modern societies attempt to cope with environmental and natural

resources problems. Focuses on the American political system, with some attention to the international dimension. Current policies and issues will be examined. Typically offered Fall Spring.

- [Humanities Core] select course from University list - Credit Hours: 3.00

Electives (15-16 credits)

An Ethics course (such as PHIL 11100 - Ethics or PHIL 29000 - Environmental Ethics) is highly recommended.

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Environmental Policy Selective List

ANTH 32700 - Environment And Culture

Credit Hours: 3.00. This course provides a general overview to the field of environmental anthropology, and surveys key methods, and theories that anthropologists use to interpret human-environment interactions. Topics include culture ecology, agroecology, ethnobiology, political ecology, and environmental justice. Typically offered Summer, Fall, or Spring.

CE 35500 - Engineering Environmental Sustainability

Credit Hours: 3.00. (EEE 35500) An introduction to the examination of global-scale resource utilization, food, energy and commodity production, population dynamics, and their ecosystem impacts. Typically offered Spring.

EAPS 32700 - Climate, Science And Society

Credit Hours: 3.00. This course will examine the broad problems of climate change by examining the relationship between science, politics, and society by using climate change as a lens through which to examine larger issues. Students will be encouraged to identify similar themes in their own experiences as emerging scientists, engineers and global leaders. Adequate preparation to write essays and perform basic arithmetic calculations needed. Prior knowledge of climate change science is not necessary. Typically offered Fall Spring.

FNR 48800 - Global Environmental Issues

Credit Hours: 3.00. Examination of the state of the world in terms of natural resource consumption, environmental quality, and global change. Techniques to analyze and evaluate information. Survey threats to soil productivity, the changing atmosphere, water quality and quantity, energy impacts, and biodiversity from an ecosystem perspective. Typically offered Fall.

POL 32700 - Global Green Politics

Credit Hours: 3.00. Analysis and assessment of the nature of global environmentalism, its connections with other new social movements, and its impact on domestic and international politics worldwide, with particular attention to green political parties and nongovernmental organizations. Typically offered Fall Spring Summer.

POL 42300 - International Environmental Policy

Credit Hours: 3.00. Environmental policy development in the international arena, with attention to international law, international organizations, and transboundary environmental problems. Typically offered Fall Spring Summer.

POL 42500 - Environmental Law And Politics

Credit Hours: 3.00. This course provides an introduction to statutory and case law relating to environmental policy. Regulatory schemes in environmental policy and the legal framework for environmental regulation are presented. Market alternatives to various regulatory mechanisms will also be treated. Typically offered Summer Fall Spring.

HSCI Humanities, Behavioral/Social Sciences Selectives List - select any course from the following subjects

- Anthropology (ANTH)
- Art & Design (AD)
- Classics (CLCS)
- Communication (COM)
- Dance (DANC)
- Economics (ECON)
- English (ENGL)
- Foreign Languages & Literatures (FLL)
- History (HIST)
- Interdisciplinary Studies (IDIS)
- Music (MUS)
- Philosophy (PHIL)
- Political Science (POL)
- Psychology (PSY)
- Sociology (SOC)
- Theatre (THTR)

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

16-17 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

14 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

16 Credits

Spring 2nd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 32100 - Analytical Chemistry I

Credit Hours: 4.00. Quantitative measurements on complex chemical systems that show matrix effects or require isolation of a component prior to its determination; general approaches to quantitative problems at the trace level; critical comparisons of competitive procedures with emphasis on principles of separation processes, including chromatography; recognition and evaluation of possible sources of error; approaches for optimizing conditions so as to minimize time and/or effort required to attain prescribed levels of accuracy and precision. Required of students majoring in chemistry. Typically offered Fall.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

15 Credits

Fall 3rd Year

AGRY 29000 - Introduction To Environmental Science

Credit Hours: 3.00. (NRES 29000, EAPS 11300) An introduction to environmental science, including issues such as air and water pollution, toxic waste disposal, soil erosion, natural hazards, climate change, energy resources, and environmental planning. Includes extensive in-class discussion of case studies. Typically offered Fall.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

HSCI 34500 - Introduction To Occupational And Environmental Health Sciences

Credit Hours: 3.00. Principles of occupational health (industrial hygiene) and environmental health as related to anticipation, recognition, evaluation, and control of hazards in the workplace and the surrounding community. Emphasis is on hazards of chemicals and their role in occupationally and environmentally related diseases. Historical basis and current legislation are discussed. In addition, the principles of epidemiology, toxicology, exposure standards, and respiratory protection are addressed. Typically offered Fall.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

15 Credits

Spring 3rd Year

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

POL 22300 - Introduction To Environmental Policy

Credit Hours: 3.00. (FNR 22310) Study of decision making as modern societies attempt to cope with environmental and natural resources problems. Focuses on the American political system, with some attention to the international dimension. Current policies and issues will be examined. Typically offered Fall Spring.

CE 35000 - Introduction To Environmental And Ecological Engineering

Credit Hours: 3.00. Introduction to water pollution, air pollution, noise, hazardous and solid wastes, and their control. Environmental impact statements and global pollution issues. Field trips required. Typically offered Fall Spring Summer.

- English Selective - Credit Hours: 3.00
- Humanities Sel. - Credit Hours: 3.00 *

16 Credits

Fall 4th Year

HK 44500 - Principles Of Epidemiology

Credit Hours: 3.00. The study of the distribution of diseases in human populations and factors that influence these distributions. Typically offered Fall Spring.

HSCI 56000 - Toxicology

Credit Hours: 3.00. (MCMP 56000) Introduction to general principles of toxicology, target organ toxicity, and safety evaluation. Covers toxicity of metals, solvents, pesticides, gases, dusts, and food additives. Typically offered Fall.

- HSCI Humanities Selective - Credit Hours: 3.00
- ENVH Policy Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 0.00 - 1.00

12-13 Credits

Note

* Satisfies a University Core Requirement.

Students must complete 32 credit hours of 30000 level or above courses for graduation at Purdue.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Health Science Pre-Professional/Pre-Chiropractic Concentration, BS

About the Program

The Health Science Pre-Professional (HSPP) programs are designed to prepare students for entry into professional schools in a wide arena of health-related professions. Building a solid foundation in the Sciences and Humanities prepares our undergraduates for the challenges of pursuing a career in the diverse and ever-changing healthcare industry. Due to the thoughtful design of our curriculum, students take similar coursework the first two years of enrollment, allowing the flexibility of switching from one HSPP program to another. The most outstanding feature of HSPP is that the course requirements for entry into professional school are incorporated into the plans of study, resulting in no extra coursework for our undergraduates.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Health Sciences Preprofessional/Pre-Chiropractic Concentration include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HLTH-BS
HSPP - PRCH
120 credits

Major Requirements (69 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

CHM 33900 - Biochemistry: A Molecular Approach

Credit Hours: 3.00. CHM 33900 is a comprehensive one-semester biochemistry course that emphasizes molecules and molecular reaction mechanisms, building upon the principles conveyed in general chemistry and organic chemistry. This course is designed to cover the essential elements of biochemistry traditionally covered in a two semester series. Topics to be covered include: Amino acids, peptides and proteins, molecular models and structure-function relationships, enzymes, enzyme kinetics and enzyme mechanisms, carbohydrates and carbohydrate metabolism, aerobic metabolism, lipids and membranes, lipid metabolism, nitrogen metabolism and integration and regulation of metabolism. Special emphasis will be placed on connections between biochemical principles and the fields of medicine, human health and disease, nutrition and biotechnology. This course should serve as excellent preparation for higher-level biochemistry courses as well as standardized pre-health professional exams. CHM 33900 was designed as the 4th semester of the 1-2-1 competency-based curriculum transformation in chemistry as it applies to pre-health professional and life science students at Purdue. However, this course is open to other students who meet the prerequisites. Typically offered Spring.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of

people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

- HSCI Humanities, behavior/Social Sciences Selective - select from HSCI list - Credit Hours: 3.00

HK 26300 - Biomechanical Foundations Of Motor Skills

Credit Hours: 3.00. Fundamental anatomical and mechanical concepts and procedures for analyzing motor skills, with particular reference to sport, dance, and aquatic activities. Typically offered Fall Spring.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving

approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Required Courses in Other Departments (23-24 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative

and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- [Humanities Core] - select course from University list - Credit Hours: 3.00

Electives (27-28 credits)

An Ethics course (such as PHIL 11100 Ethics or PHIL 27000 Biomedical Ethics) is highly recommended.

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation

120 credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

HSCI Humanities, Behavioral/Social Sciences Selectives List

Select any course(s) numbered 10000-59999 from the following subjects:

- Anthropology (ANTH)
- Art & Design (AD)
- Classics (CLCS)
- Communication (COM)
- Dance (DANC)
- Economics (ECON)
- English (ENGL)
- Foreign Languages & Literatures (FLL)
- History (HIST)
- Interdisciplinary Studies (IDIS)
- Music (MUS)
- Philosophy (PHIL)
- Political Science (POL)
- Psychology (PSY)
- Sociology (SOC)
- Theatre (THTR)

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

16-17 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

14 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

15 Credits

Spring 2nd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

15 Credits

Fall 3rd Year

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

HK 26300 - Biomechanical Foundations Of Motor Skills

Credit Hours: 3.00. Fundamental anatomical and mechanical concepts and procedures for analyzing motor skills, with particular reference to sport, dance, and aquatic activities. Typically offered Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and

regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- English Selective - Select any 20000 or above ENGL course - Credit Hours: 3.00

15 Credits

Spring 3rd Year

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

- HSCI Humanities Selective - Select from HSCI list - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

14 Credits

Fall 4th Year

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

- Humanities Selective - Select from University list - Credit Hours: 3.00 *
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 0.00 - 1.00

15-16 Credits

Note

*** Satisfies a University Core Requirement.**

Students must complete 32 credit hours of 30000 level or above courses for graduation at Purdue.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science Degree.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Health Science Pre-Professional/Pre-Dentistry Concentration, BS

About the Program

The Health Science Pre-Professional (HSPP) programs are designed to prepare students for entry into professional schools in a wide arena of health-related professions. Building a solid foundation in the Sciences and Humanities prepares our undergraduates for the challenges of pursuing a career in the diverse and ever-changing healthcare industry. Due to the thoughtful design of our curriculum, students take similar coursework the first two years of enrollment, allowing the flexibility of switching from one HSPP program to another. The most outstanding feature of HSPP is that the course requirements for entry into professional school are incorporated into the plans of study, resulting in no extra coursework for our undergraduates.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Health Sciences Preprofessional/Pre-Dentistry Concentration include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HLTH-BS
HSPP - PRDN
120 credits

Major Requirements (67 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the

human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods

of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

CHM 33900 - Biochemistry: A Molecular Approach

Credit Hours: 3.00. CHM 33900 is a comprehensive one-semester biochemistry course that emphasizes molecules and molecular reaction mechanisms, building upon the principles conveyed in general chemistry and organic chemistry. This course is designed to cover the essential elements of biochemistry traditionally covered in a two semester series. Topics to be covered include: Amino acids, peptides and proteins, molecular models and structure-function relationships, enzymes, enzyme kinetics and enzyme mechanisms, carbohydrates and carbohydrate metabolism, aerobic metabolism, lipids and membranes, lipid metabolism, nitrogen metabolism and integration and regulation of metabolism. Special emphasis will be placed on connections between biochemical principles and the fields of medicine, human health and disease, nutrition and biotechnology. This course should serve as excellent preparation for higher-level biochemistry courses as well as standardized pre-health professional exams. CHM 33900 was designed as the 4th semester of the 1-2-1 competency-based curriculum transformation in chemistry as it applies to pre-health professional and life science students at Purdue. However, this course is open to other students who meet the prerequisites. Typically offered Spring.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

- HSCI Humanities, Behavior/Social Sciences Selective - select from HSCI list - Credit Hours: 3.00

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

STAT 50300 - Statistical Methods For Biology

Credit Hours: 3.00. Introductory statistical methods, with emphasis on applications in biology. Topics include descriptive statistics, binomial and normal distributions, confidence interval estimation, hypothesis testing, analysis of variance, introduction to nonparametric testing, linear regression and correlation, goodness-of-fit tests, and contingency tables. Open only to majors related to the life sciences. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, STAT 35000, STAT 50100, and in no more than one of STAT 50300 and STAT 51100. Typically offered Fall Spring Summer.

Required Courses in Other Departments (23-24 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

- [Humanities Core] - select course from University list - Credit Hours: 3.00

Electives (29-30 credits)

An Ethics course (such as PHIL 11100 Ethics or PHIL 27000 Biomedical Ethics) is highly recommended.

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation

120 credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

HSCI Humanities, Behavioral/Social Sciences Selectives List - select any course(s) from the following subjects

- Anthropology (ANTH)
- Art & Design (AD)
- Classics (CLCS)
- Communication (COM)
- Dance (DANC)
- Economics (ECON)
- English (ENGL)
- Foreign Languages & Literatures (FLL)
- History (HIST)
- Interdisciplinary Studies (IDIS)
- Music (MUS)
- Philosophy (PHIL)
- Political Science (POL)
- Psychology (PSY)
- Sociology (SOC)
- Theatre (THTR)

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

16-17 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

14 Credits

Fall 2nd Year

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

14 Credits

Spring 2nd Year

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

- Elective - Credit Hours: 1.00 - 2.00

15-16 Credits

Fall 3rd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

CHM 33900 - Biochemistry: A Molecular Approach

Credit Hours: 3.00. CHM 33900 is a comprehensive one-semester biochemistry course that emphasizes molecules and molecular reaction mechanisms, building upon the principles conveyed in general chemistry and organic chemistry. This course is designed to cover the essential elements of biochemistry traditionally covered in a two semester series. Topics to be covered include: Amino acids, peptides and proteins, molecular models and structure-function relationships, enzymes, enzyme kinetics and enzyme mechanisms, carbohydrates and carbohydrate metabolism, aerobic metabolism, lipids and membranes, lipid metabolism, nitrogen metabolism and integration and regulation of metabolism. Special emphasis will be placed on connections between biochemical principles and the fields of medicine, human health and disease, nutrition and biotechnology. This course should serve as excellent preparation for higher-level biochemistry courses as well as standardized pre-health professional exams. CHM 33900 was designed as the 4th semester of the 1-2-1 competency-based curriculum transformation in chemistry as it applies to pre-health professional and life science students at Purdue. However, this course is open to other students who meet the prerequisites. Typically offered Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- Humanities Sel. - Select from University list - Credit Hours: 3.00 *

- Elective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

- Elective - Credit Hours: 3.00
- English Selective - Select any 20000 or above ENGL course - Credit Hours: 3.00
- HSCI Humanities Selective - Select from HSCI list - Credit Hours: 3.00

15 Credits

Fall 4th Year

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation

design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

16 Credits

Spring 4th Year

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00

13 Credits

Note

*** Satisfies a University Core Requirement.**

Students must complete 32 credit hours of 30000 level or above courses for graduation at Purdue.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science Degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Health Science Pre-Professional/Pre-Medicine Concentration, BS

About the Program

The Health Science Pre-Professional (HSPP) programs are designed to prepare students for entry into professional schools in a wide arena of health-related professions. Building a solid foundation in the Sciences and Humanities prepares our undergraduates for the challenges of pursuing a career in the diverse and ever-changing healthcare industry. Due to the thoughtful design of our curriculum, students take similar coursework the first two years of enrollment, allowing the flexibility of switching from one HSPP program to another. The most outstanding feature of HSPP is that the course requirements for entry into professional school are incorporated into the plans of study, resulting in no extra coursework for our undergraduates.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Health Sciences Preprofessional/Pre-Medicine Concentration include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HLTH-BS
HSPP - PMED
120 credits

Major Requirements (77 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of

microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

BIOL 23100 - Biology III: Cell Structure And Function

Credit Hours: 3.00. An introduction to modern cell biology through an examination of the physical and chemical properties that lead to an understanding of the molecular basis for cell function. Typically offered Fall.

BIOL 23200 - Laboratory In Biology III: Cell Structure And Function

Credit Hours: 2.00. Laboratory exercises designed to illustrate the properties, functions, and growth of prokaryotic and eukaryotic cells and to introduce the student to modern experimental methods used to study cells and their separated components. Typically offered Fall.

BIOL 24100 - Biology IV: Genetics And Molecular Biology

Credit Hours: 3.00. An introduction to the principles of classical genetics and to molecular genetics. Topics covered are transmission of the genetic material (both in eukaryotes and prokaryotes); changes in the genetic material, structure, and function of the genetic material; and the manipulation of genetic material (recombinant DNA technology). Typically offered Spring.

BIOL 24200 - Laboratory In Biology IV: Genetics And Molecular Biology

Credit Hours: 2.00. Experiments in classical and modern genetics and exercises to acquaint the students with basic techniques in molecular biology. Typically offered Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

CHM 33900 - Biochemistry: A Molecular Approach

Credit Hours: 3.00. CHM 33900 is a comprehensive one-semester biochemistry course that emphasizes molecules and molecular reaction mechanisms, building upon the principles conveyed in general chemistry and organic chemistry. This course is designed to cover the essential elements of biochemistry traditionally covered in a two semester series. Topics to be covered include: Amino acids, peptides and proteins, molecular models and structure-function relationships, enzymes, enzyme kinetics and enzyme mechanisms, carbohydrates and carbohydrate metabolism, aerobic metabolism, lipids and membranes, lipid metabolism, nitrogen metabolism and integration and regulation of metabolism. Special emphasis will be placed on connections between biochemical principles and the fields of medicine, human health and disease, nutrition and biotechnology. This course should serve as excellent preparation for higher-level biochemistry courses as well as standardized pre-health professional exams. CHM 33900 was designed as the 4th semester of the 1-2-1 competency-based curriculum transformation in chemistry as it applies to

pre-health professional and life science students at Purdue. However, this course is open to other students who meet the prerequisites. Typically offered Spring.

BCHM 56100 - General Biochemistry I

Credit Hours: 3.00. This course provides upper-division undergraduate and graduate students with basic understanding of biochemical and structural properties of amino acids, nucleic acids, lipids, and carbohydrates. This course allows students to connect the relationship between structure and function of biomolecules. In addition, students learn to understand enzyme properties, enzyme mechanism of action, and enzyme regulation. Typically offered Fall.

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and

membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Required Courses in Other Departments (23-24 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- [Humanities Core] - select course from University list - Credit Hours: 3.00

Electives* (19-20 credits)

*An Ethics course (such as PHIL 11100 Ethics or PHIL 27000 Biomedical Ethics) is highly recommended.

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation

120 credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

16-17 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

14 Credits

Fall 2nd Year

BIOL 23100 - Biology III: Cell Structure And Function

Credit Hours: 3.00. An introduction to modern cell biology through an examination of the physical and chemical properties that lead to an understanding of the molecular basis for cell function. Typically offered Fall.

BIOL 23200 - Laboratory In Biology III: Cell Structure And Function

Credit Hours: 2.00. Laboratory exercises designed to illustrate the properties, functions, and growth of prokaryotic and eukaryotic cells and to introduce the student to modern experimental methods used to study cells and their separated components. Typically offered Fall.

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and

mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

16 Credits

Spring 2nd Year

BIOL 24100 - Biology IV: Genetics And Molecular Biology

Credit Hours: 3.00. An introduction to the principles of classical genetics and to molecular genetics. Topics covered are transmission of the genetic material (both in eukaryotes and prokaryotes); changes in the genetic material, structure, and function of the genetic material; and the manipulation of genetic material (recombinant DNA technology). Typically offered Spring.

BIOL 24200 - Laboratory In Biology IV: Genetics And Molecular Biology

Credit Hours: 2.00. Experiments in classical and modern genetics and exercises to acquaint the students with basic techniques in molecular biology. Typically offered Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

16 Credits

Fall 3rd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality,

intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

- English Selective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of

microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

- Humanities Selective - Credit Hours: 3.00 *
- Elective - Credit Hours: 3.00

13 Credits

Spring 4th Year

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00 - 2.00

13-14 Credits

Note

***Satisfies a University Core Requirement.**

Students must complete 32 credit hours of 30000 level or above courses for graduation.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Health Science Pre-Professional/Pre-Occupational Therapy Concentration, BS

About the Program

The Health Science Pre-Professional (HSPP) programs are designed to prepare students for entry into professional schools in a wide arena of health-related professions. Building a solid foundation in the Sciences and Humanities prepares our undergraduates for the challenges of pursuing a career in the diverse and ever-changing healthcare industry. Due to the thoughtful design of our curriculum, students take similar coursework the first two years of enrollment, allowing the flexibility of switching from one HSPP program to another. The most outstanding feature of HSPP is that the course requirements for entry into professional school are incorporated into the plans of study, resulting in no extra coursework for our undergraduates.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Health Sciences Preprofessional/Pre-Occupational Therapy Concentration include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HLTH-BS

HSPP - PROT

120 credits

Major Requirements (72 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701= CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation,

identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HK 25800 - Foundations Of Motor Skill Learning

Credit Hours: 3.00. Concepts and principles of motor skill learning, with emphasis on the acquisition and retention of gross movement and sport skills. Typically offered Fall Spring.

HK 26100 - Applied Anatomy And Kinesiology

Credit Hours: 3.00. The study of how muscles, bones, and joint structure produce human motion. Kinesiological analysis of full body, upper and lower extremity skills. Typically offered Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

PSY 35000 - Abnormal Psychology

Credit Hours: 3.00. Various forms of mental disorders from the standpoint of their origin, treatment, prevention, social significance, and relation to problems of normal human adjustment. Typically offered Fall Spring Summer. CTL:ISH 1023 Abnormal Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Required Courses in Other Departments (23-24 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

- [Humanities Core] - select course from University list - Credit Hours: 3.00

Electives (24-25 credits)

*An Ethics course (such as PHIL 11100 Ethics or PHIL 27000 Biomedical Ethics) is highly recommended.

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation

120 credits required for Bachelor of Science degree

University Foundational Learning Outcomes List:

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

16-17 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

14 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701= CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

16 Credits

Spring 2nd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

14 Credits

Fall 3rd Year

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

HK 25800 - Foundations Of Motor Skill Learning

Credit Hours: 3.00. Concepts and principles of motor skill learning, with emphasis on the acquisition and retention of gross movement and sport skills. Typically offered Fall Spring.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

14 Credits

Spring 3rd Year

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HK 26100 - Applied Anatomy And Kinesiology

Credit Hours: 3.00. The study of how muscles, bones, and joint structure produce human motion. Kinesiological analysis of full body, upper and lower extremity skills. Typically offered Spring.

- Humanities Selective - Select from University list - Credit Hours: 3.00 *

PSY 35000 - Abnormal Psychology

Credit Hours: 3.00. Various forms of mental disorders from the standpoint of their origin, treatment, prevention, social significance, and relation to problems of normal human adjustment. Typically offered Fall Spring Summer. CTL:ISH 1023
Abnormal Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

15 Credits

Fall 4th Year

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- English Selective - Select any 20000 or above English Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00 - 4.00

15-16 Credits

Note

*** Satisfies a University Core Requirement.**

Students must complete 32 credit hours of 30000 level or above courses for graduation at Purdue.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science Degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Health Science Pre-Professional/Pre-Optometry Concentration, BS

About the Program

The Health Science Pre-Professional (HSPP) programs are designed to prepare students for entry into professional schools in a wide arena of health-related professions. Building a solid foundation in the Sciences and Humanities prepares our undergraduates for the challenges of pursuing a career in the diverse and ever-changing healthcare industry. Due to the thoughtful design of our curriculum, students take similar coursework the first two years of enrollment, allowing the flexibility of switching from one HSPP program to another. The most outstanding feature of HSPP is that the course requirements for entry into professional school are incorporated into the plans of study, resulting in no extra coursework for our undergraduates.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Health Sciences Preprofessional/Pre-Optometry Concentration include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HLTH-BS

HSPP - PROP

120 credits

Major Requirements (64 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by

reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

CHM 33900 - Biochemistry: A Molecular Approach

Credit Hours: 3.00. CHM 33900 is a comprehensive one-semester biochemistry course that emphasizes molecules and molecular reaction mechanisms, building upon the principles conveyed in general chemistry and organic chemistry. This course is designed to cover the essential elements of biochemistry traditionally covered in a two semester series. Topics to be covered include: Amino acids, peptides and proteins, molecular models and structure-function relationships, enzymes, enzyme kinetics and enzyme mechanisms, carbohydrates and carbohydrate metabolism, aerobic metabolism, lipids and membranes, lipid metabolism, nitrogen metabolism and integration and regulation of metabolism. Special emphasis will be placed on connections between biochemical principles and the fields of medicine, human health and disease, nutrition and biotechnology. This course should serve as excellent preparation for higher-level biochemistry courses as well as standardized pre-health professional exams. CHM 33900 was designed as the 4th semester of the 1-2-1 competency-based curriculum transformation in chemistry as it applies to pre-health professional and life science students at Purdue. However, this course is open to other students who meet the prerequisites. Typically offered Spring.

BCHM 56100 - General Biochemistry I

Credit Hours: 3.00. This course provides upper-division undergraduate and graduate students with basic understanding of biochemical and structural properties of amino acids, nucleic acids, lipids, and carbohydrates. This course allows students to connect the relationship between structure and function of biomolecules. In addition, students learn to understand enzyme properties, enzyme mechanism of action, and enzyme regulation. Typically offered Fall.

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

- HSCI Humanities, Behavior/Social Sciences Selective - select from HSCI list - Credit Hours: 3.00

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration

of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

STAT 50300 - Statistical Methods For Biology

Credit Hours: 3.00. Introductory statistical methods, with emphasis on applications in biology. Topics include descriptive statistics, binomial and normal distributions, confidence interval estimation, hypothesis testing, analysis of variance, introduction to nonparametric testing, linear regression and correlation, goodness-of-fit tests, and contingency tables. Open only to majors related to the life sciences. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, STAT 35000, STAT 50100, and in no more than one of STAT 50300 and STAT 51100. Typically offered Fall Spring Summer.

Required Courses in Other Departments (23-24 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- [Humanities Core] - select course from University list - Credit Hours: 3.00

Electives (32-33 credits)

An Ethics course (such as PHIL 11100 Ethics or PHIL 27000 Biomedical Ethics) is highly recommended.

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation

120 credits required for Bachelor of Science degree

University Foundational Learning Outcomes List:

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

HSCI Humanities, Behavioral/Social Sciences Selectives List - select any course(s) numbers 10000-59999 from the following subjects:

- Anthropology (ANTH)
- Art & Design (AD)
- Classics (CLCS)
- Communication (COM)
- Dance (DANC)
- Economics (ECON)
- English (ENGL)
- Foreign Languages & Literatures (FLL)

- History (HIST)
- Interdisciplinary Studies (IDIS)
- Music (MUS)
- Philosophy (PHIL)
- Political Science (POL)
- Psychology (PSY)
- Sociology (SOC)
- Theatre (THTR)

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

16-17 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

14 Credits

Fall 2nd Year

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

- Elective - Credit Hours: 3.00

14 Credits

Spring 2nd Year

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

- Elective - Credit Hours: 3.00

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

14 Credits

Fall 3rd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

CHM 33900 - Biochemistry: A Molecular Approach

Credit Hours: 3.00. CHM 33900 is a comprehensive one-semester biochemistry course that emphasizes molecules and molecular reaction mechanisms, building upon the principles conveyed in general chemistry and organic chemistry. This course is designed to cover the essential elements of biochemistry traditionally covered in a two semester series. Topics to be covered include: Amino acids, peptides and proteins, molecular models and structure-function relationships, enzymes, enzyme kinetics and enzyme mechanisms, carbohydrates and carbohydrate metabolism, aerobic metabolism, lipids and membranes, lipid metabolism, nitrogen metabolism and integration and regulation of metabolism. Special emphasis will be placed on connections between biochemical principles and the fields of medicine, human health and disease, nutrition and biotechnology. This course should serve as excellent preparation for higher-level biochemistry courses as well as standardized pre-health professional exams. CHM 33900 was designed as the 4th semester of the 1-2-1 competency-based curriculum transformation in chemistry as it applies to pre-health professional and life science students at Purdue. However, this course is open to other students who meet the prerequisites. Typically offered Spring.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and

regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- Elective - Credit Hours: 3.00

16 Credits

Spring 3rd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- English Selective - Select any 20000 or above ENGL course - Credit Hours: 3.00

16 Credits

Fall 4th Year

- Humanities Selective - (Select from University list) - Credit Hours: 3.00 *
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Elective - Credit Hours: 2.00 - 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- HSCI Humanities Selective - Select from HSCI list - Credit Hours: 3.00

14-15 Credits

Note

***Satisfies a University Core Requirement.**

Students must complete 32 credit hours of 30000 level or higher courses for graduation.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Health Science Pre-Professional/Pre-Physical Therapy Concentration, BS

About the Program

The Health Science Pre-Professional (HSPP) programs are designed to prepare students for entry into professional schools in a wide arena of health-related professions. Building a solid foundation in the Sciences and Humanities prepares our undergraduates for the challenges of pursuing a career in the diverse and ever-changing healthcare industry. Due to the thoughtful design of our curriculum, students take similar coursework the first two years of enrollment, allowing the flexibility of switching from one HSPP program to another. The most outstanding feature of HSPP is that the course requirements for entry into professional school are incorporated into the plans of study, resulting in no extra coursework for our undergraduates.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Health Science Preprofessional/Pre-Physical Therapy Concentration include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HLTH-BS
HSPP - PRPH
120 credits

Major Requirements (69 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation

design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or

senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

SOC 57300 - The Human Side Of Medicine

Credit Hours: 3.00. Focuses on sociological theory and research related to social conflicts over the delivery of healthcare in the U.S. Considers social issues pertaining to abortion, AIDS, human experimentation, reproductive technologies, euthanasia, and others. Typically offered Fall Spring.

SOC 57400 - The Social Organization Of Healthcare

Credit Hours: 3.00. Analysis of the determinants and consequences of the social organization of medical care. Considers morbidity and mortality, costs and utilization of medical services, healthcare occupations and institutions, and change in programs and policies. Typically offered Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Required Courses in Other Departments (23-24 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- [Humanities Core] - select course from University list - Credit Hours: 3.00

Electives (27-28 credits)

An Ethics course (such as PHIL 11100 - Ethics or PHIL 27000 - Biomedical Ethics) is highly recommended.

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation

120 credits required for Bachelor of Science degree

University Foundational Learning Outcomes List:

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

16-17 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

14 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

16 Credits

Spring 2nd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

14 Credits

Fall 3rd Year

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

- HK Selective (HK 36800 preferred) - Credit Hours: 3.00

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

14 Credits

Spring 3rd Year

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

SOC 57300 - The Human Side Of Medicine

Credit Hours: 3.00. Focuses on sociological theory and research related to social conflicts over the delivery of healthcare in the U.S. Considers social issues pertaining to abortion, AIDS, human experimentation, reproductive technologies, euthanasia, and others. Typically offered Fall Spring.

SOC 57400 - The Social Organization Of Healthcare

Credit Hours: 3.00. Analysis of the determinants and consequences of the social organization of medical care. Considers morbidity and mortality, costs and utilization of medical services, healthcare occupations and institutions, and change in programs and policies. Typically offered Fall Spring.

- Elective - Credit Hours: 3.00
- English Selective (Select any 20000 level or above ENGL course) - Credit Hours: 3.00

15 Credits

Fall 4th Year

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies

to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Humanities Selective (Select from University List) - Credit Hours: 3.00 *
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00 - 4.00

15-16 Credits

Note

*** Satisfies a University Core Requirement.**

Students must complete 32 credit hours of 30000 level or above courses for graduation at Purdue.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science Degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Health Science Pre-Professional/Pre-Physician's Assistant Concentration, BS

About the Program

The Health Science Pre-Professional (HSPP) programs are designed to prepare students for entry into professional schools in a wide arena of health-related professions. Building a solid foundation in the Sciences and Humanities prepares our undergraduates for the challenges of pursuing a career in the diverse and ever-changing healthcare industry. Due to the thoughtful design of our curriculum, students take similar coursework the first two years of enrollment, allowing the flexibility of switching from one HSPP program to another. The most outstanding feature of HSPP is that the course requirements for entry into professional school are incorporated into the plans of study, resulting in no extra coursework for our undergraduates.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Health Sciences Preprofessional/Pre-Physician Assistant Concentration include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HLTH-BS
HSPP - PRPA
120 credits

Major Requirements (70 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

CHM 33900 - Biochemistry: A Molecular Approach

Credit Hours: 3.00. CHM 33900 is a comprehensive one-semester biochemistry course that emphasizes molecules and molecular reaction mechanisms, building upon the principles conveyed in general chemistry and organic chemistry. This course is designed to cover the essential elements of biochemistry traditionally covered in a two semester series. Topics to be covered include: Amino acids, peptides and proteins, molecular models and structure-function relationships, enzymes, enzyme kinetics and enzyme mechanisms, carbohydrates and carbohydrate metabolism, aerobic metabolism, lipids and membranes, lipid metabolism, nitrogen metabolism and integration and regulation of metabolism. Special emphasis will be placed on connections between biochemical principles and the fields of medicine, human health and disease, nutrition and biotechnology. This course should serve as excellent preparation for higher-level biochemistry courses as well as standardized pre-health professional exams. CHM 33900 was designed as the 4th semester of the 1-2-1 competency-based curriculum transformation in chemistry as it applies to pre-health professional and life science students at Purdue. However, this course is open to other students who meet the prerequisites. Typically offered Spring.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body

system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

- Psychology Selective - select any PSY course number 10000-59999 except PSY 12000 - Credit Hours: 3.00

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Required Courses in Other Departments (23-24 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- [Humanities Core] - select course from University list - Credit Hours: 3.00

Electives (26-27 credits)

An Ethics course (such as PHIL 11100 - Ethics or PHIL 27000 - Biomedical Ethics) is highly recommended.

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation.

120 credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

16-17 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative

and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

14 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

15 Credits

Spring 2nd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious

and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

15 Credits

Fall 3rd Year

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

- English Selective (Select any 20000 or above ENGL course) - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL: IPO 1820 Medical Terminology

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

- Elective - Credit Hours: 3.00
- Humanities Selective - (Select from University list) - Credit Hours: 3.00 *
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- PSY Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00 - 3.00

14-15 Credits

Note

*** Satisfies a University Core Requirement.**

Students must complete 32 credit hours of 30000 level or above courses for graduation at Purdue.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science Degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Health Science Pre-Professional/Public Health Concentration, BS

About the Program

The Health Science Pre-Professional (HSPP) programs are designed to prepare students for entry into professional schools in a wide arena of health-related professions. Building a solid foundation in the Sciences and Humanities prepares our undergraduates for the challenges of pursuing a career in the diverse and ever-changing healthcare industry. Due to the thoughtful design of our curriculum, students take similar coursework the first two years of enrollment, allowing the flexibility of switching from one HSPP program to another. The most outstanding feature of HSPP is that the course requirements for entry into professional school are incorporated into the plans of study, resulting in no extra coursework for our undergraduates.

Summary of Program Requirements

The Summary of Program Requirements for 2016-17 HSPP-Public Health Concentration is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

HLTH-BS
HSPP - PUBH
120 credits

Major Requirements (88 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

ECON 25200 - Macroeconomics

Credit Hours: 3.00. Introduction to macroeconomic theory. The course develops a theoretical framework permitting an analysis of the forces affecting national income, employment, interest rates, and the rate of inflation. Emphasis is placed upon the role of government fiscal and monetary policy in promoting economic growth and stable prices. Typically offered Fall Spring Summer. CTL:ISH 1041 Macroeconomics

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HK 44500 - Principles Of Epidemiology

Credit Hours: 3.00. The study of the distribution of diseases in human populations and factors that influence these distributions. Typically offered Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 34500 - Introduction To Occupational And Environmental Health Sciences

Credit Hours: 3.00. Principles of occupational health (industrial hygiene) and environmental health as related to anticipation, recognition, evaluation, and control of hazards in the workplace and the surrounding community. Emphasis is on hazards of chemicals and their role in occupationally and environmentally related diseases. Historical basis and current legislation are discussed. In addition, the principles of epidemiology, toxicology, exposure standards, and respiratory protection are addressed. Typically offered Fall.

HSCI 56000 - Toxicology

Credit Hours: 3.00. (MCMP 56000) Introduction to general principles of toxicology, target organ toxicity, and safety evaluation. Covers toxicity of metals, solvents, pesticides, gases, dusts, and food additives. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PHIL 27000 - Biomedical Ethics

Credit Hours: 3.00. An examination of the moral problems raised by developments in medicine and the biomedical sciences. Topics include abortion, reproductive technologies, euthanasia and physician-assisted suicide, experiments involving human subjects, and health care delivery. Typically offered Fall Spring.

PHIL 29000 - Environmental Ethics

Credit Hours: 3.00. An introduction to philosophical issues surrounding debates about the environment and our treatment of it. Topics may include endangered species, "deep ecology," the scope and limits of cost-benefit analyses, and duties to future generations. Typically offered Fall Spring.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and

membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

PSY 35000 - Abnormal Psychology

Credit Hours: 3.00. Various forms of mental disorders from the standpoint of their origin, treatment, prevention, social significance, and relation to problems of normal human adjustment. Typically offered Fall Spring Summer. CTL:ISH 1023
Abnormal Psychology

SOC 57200 - Comparative Healthcare Systems

Credit Hours: 3.00. Using cost, quality, and access to care as core concepts, this course explores healthcare in comparative context. Special topics are health and gender, the environment, epidemics, long-term care, technology, and rationing, among others. Typically offered Fall Spring.

SOC 57400 - The Social Organization Of Healthcare

Credit Hours: 3.00. Analysis of the determinants and consequences of the social organization of medical care. Considers morbidity and mortality, costs and utilization of medical services, healthcare occupations and institutions, and change in programs and policies. Typically offered Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Public Health Selectives - select from list (9 credits)

Required Courses in Other Departments (23-24 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in

agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- [Humanities Core] - select course from University list - Credit Hours: 3.00

Electives (8-9 credits)

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation.

120 credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Public Health Selectives List

(*Highly recommended courses)

ANTH 20300 - Biological Bases Of Human Social Behavior

Credit Hours: 3.00. This course is an introduction to human social behavior from the perspective of biological anthropology, with special emphasis on human evolution and non-human primates. Topics include aggression, communication, learning, maturation, sexuality, and the evolution of social systems. Typically offered Fall Spring.

ANTH 20500 - Human Cultural Diversity

Credit Hours: 3.00. Using concepts and models of cultural anthropology, this course will survey the principal cultural types of the world and their distribution, and will undertake a detailed analysis of societies representative of each type. Typically offered Fall Spring.

ANTH 21200 - Culture, Food And Health

Credit Hours: 3.00. This course is designed to provide an introduction to the field of Medical Anthropology in which we will examine issues related to health and illness from various perspectives outside of the Western biomedical perspective. Typically offered Fall Spring.

COM 25000 - Mass Communication And Society

Credit Hours: 3.00. A survey of the print, broadcast, and film media in their relationship and influence on society. Study topics include: mass communication theories, documentaries, commercialism, news media, media effects and control, feedback, educational broadcasting, and audience analysis. Typically offered Fall Spring Summer. CTL:ICM 1102 Introduction To Mass Communication

EAPS 11300 - Introduction To Environmental Science

Credit Hours: 3.00. (NRES 29000, AGRY 29000) An introduction to environmental science, including issues such as climate change, energy resources, air and water pollution, toxic waste disposal, soil erosion, natural hazards, and environmental planning. Includes extensive in-class discussion of case studies. Typically offered Fall.

HIST 30200 - Historical Topics

Credit Hours: 3.00. This variable-title course deals with broad historical topics that transcend and collapse traditional analytical, chronological, and geographic boundaries. Content will vary with faculty member teaching the class. Typically offered Fall Spring.

HK 22500 - Sexuality And Health

Credit Hours: 3.00. Deals with various aspects of human sexuality and sexual behavior and their impact upon individual health. Health concerns related to sexual behavior. Typically offered Fall Spring Summer.

HK 23100 - Substance Abuse And Health

Credit Hours: 3.00. The study of drug abuse and drug education, including stimulants, depressants, psychedelics, and other drugs and harmful substances; beverage alcohol usage and health effects of tobacco smoking. Education materials and techniques are examined. Typically offered Summer Fall Spring.

HK 23300 - Stress And Human Health

Credit Hours: 3.00. Course is designed to provide an understanding of stress and stress management, including the physiology of the stress response, the relationship between stress and disease, potential sources of stress, and methods of intervening to prevent and/or relieve stress. Typically offered Summer Fall Spring.

HK 44000 - Human Diseases And Disorders

Credit Hours: 3.00. The major communicable and noncommunicable diseases and disorders that afflict modern man, with particular emphasis upon the etiology, epidemiology, and ecology of these diseases and disorders. Typically offered Fall Spring.

HSCI 54700 - Fundamentals Of Epidemiology

Credit Hours: 3.00. This course is an introduction to epidemiology, which is the study of the patterns, causes, and impact of disease in populations. Epidemiology is increasingly important for public health and clinical medicine research and policy. This course will discuss the basic principles and methods of epidemiology, including measurements of disease occurrence and association, study designs, and determination of causality. Contemporary examples will be used to illustrate the application of these concepts, with an emphasis on environmental causes of disease. Typically offered Fall.

NUTR 39800 - International Special Topics

Credit Hours: 1.00 to 3.00. Course taken during an international experience that is recognized by the University. Typically offered Fall Spring Summer.

NUTR 59000 - Special Problems In Nutrition

Credit Hours: 1.00 to 4.00. Individual problems dealing with various aspects of nutrition. Permission of instructor required. Typically offered Fall Summer Spring.

POL 12000 - Introduction To Public Policy And Public Administration

Credit Hours: 3.00. An introduction to the fields of public policy and public administration. Processes of policy formation and administration are examined. Different approaches to evaluating and improving public policies are discussed. Typically offered Summer Fall Spring.

PSY 36700 - Adult Development And Aging

Credit Hours: 3.00. Theory and research on adult development from young adulthood through the elderly years. Course covers biological, cognitive, personality, and social issues. Topics include vocational choice, marriage, parenthood, the empty nest, menopause, memory and aging, retirement, widowhood, longevity, and death and dying. Typically offered Fall Spring Summer.

SOC 22000 - Social Problems

Credit Hours: 3.00. Contemporary problems at the community, society, and international levels, focusing on patterns of social organization and social change in American society, with concentration on such topics as technological militarism and war, poverty, racism, political protest, and cybernation. Typically offered Fall Spring Summer. CTL:ISH 1061 Social Problems

SOC 37400 - Medical Sociology

Credit Hours: 3.00. Provides an overview of the sociological determinants and consequences of health, the patient experience, health care providers, the organization of the health care system. Typically offered Fall Spring.

SOC 57100 - Health And Social Behavior

Credit Hours: 3.00. A sociological examination of health and illness that emphasizes the patient and his or her relations to others. Considers the distribution of illness, stress, health and illness behavior, patient-practitioner relationships, and treatment modes. Typically offered Fall Spring.

SOC 57200 - Comparative Healthcare Systems

Credit Hours: 3.00. Using cost, quality, and access to care as core concepts, this course explores healthcare in comparative context. Special topics are health and gender, the environment, epidemics, long-term care, technology, and rationing, among others. Typically offered Fall Spring.

SOC 57300 - The Human Side Of Medicine

Credit Hours: 3.00. Focuses on sociological theory and research related to social conflicts over the delivery of healthcare in the U.S. Considers social issues pertaining to abortion, AIDS, human experimentation, reproductive technologies, euthanasia, and others. Typically offered Fall Spring.

SOC 57400 - The Social Organization Of Healthcare

Credit Hours: 3.00. Analysis of the determinants and consequences of the social organization of medical care. Considers morbidity and mortality, costs and utilization of medical services, healthcare occupations and institutions, and change in programs and policies. Typically offered Fall Spring.

SOC 57600 - Health And Aging In Social Context

Credit Hours: 3.00. Analysis of the social and cultural influences on health in adulthood and later life. Considers distribution of illness among older adults, health behavior, and health services use, including long-term care. Typically offered Fall Spring.

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

16-17 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

14 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

16 Credits

Spring 2nd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

14 Credits

Fall 3rd Year

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

HSCI 34500 - Introduction To Occupational And Environmental Health Sciences

Credit Hours: 3.00. Principles of occupational health (industrial hygiene) and environmental health as related to anticipation, recognition, evaluation, and control of hazards in the workplace and the surrounding community. Emphasis is on hazards of chemicals and their role in occupationally and environmentally related diseases. Historical basis and current legislation are discussed. In addition, the principles of epidemiology, toxicology, exposure standards, and respiratory protection are addressed. Typically offered Fall.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- Public Health Selective - Select from list - Credit Hours: 3.00

15 Credits

Spring 3rd Year

PHIL 27000 - Biomedical Ethics

Credit Hours: 3.00. An examination of the moral problems raised by developments in medicine and the biomedical sciences. Topics include abortion, reproductive technologies, euthanasia and physician-assisted suicide, experiments involving human subjects, and health care delivery. Typically offered Fall Spring.

PHIL 29000 - Environmental Ethics

Credit Hours: 3.00. An introduction to philosophical issues surrounding debates about the environment and our treatment of it. Topics may include endangered species, "deep ecology," the scope and limits of cost-benefit analyses, and duties to future generations. Typically offered Fall Spring.

PSY 35000 - Abnormal Psychology

Credit Hours: 3.00. Various forms of mental disorders from the standpoint of their origin, treatment, prevention, social significance, and relation to problems of normal human adjustment. Typically offered Fall Spring Summer. CTL:ISH 1023 Abnormal Psychology

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

- Public Health Selective - Select from list - Credit Hours: 3.00
- Humanities Selective - Credit Hours: 3.00 *

15 Credits

Fall 4th Year

HK 44500 - Principles Of Epidemiology

Credit Hours: 3.00. The study of the distribution of diseases in human populations and factors that influence these distributions. Typically offered Fall Spring.

HSCI 56000 - Toxicology

Credit Hours: 3.00. (MCMP 56000) Introduction to general principles of toxicology, target organ toxicity, and safety evaluation. Covers toxicity of metals, solvents, pesticides, gases, dusts, and food additives. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of

people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

SOC 57200 - Comparative Healthcare Systems

Credit Hours: 3.00. Using cost, quality, and access to care as core concepts, this course explores healthcare in comparative context. Special topics are health and gender, the environment, epidemics, long-term care, technology, and rationing, among others. Typically offered Fall Spring.

SOC 57400 - The Social Organization Of Healthcare

Credit Hours: 3.00. Analysis of the determinants and consequences of the social organization of medical care. Considers morbidity and mortality, costs and utilization of medical services, healthcare occupations and institutions, and change in programs and policies. Typically offered Fall Spring.

- Public Health Selective - Select from list - Credit Hours: 3.00

15 Credits

Spring 4th Year

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

ECON 25200 - Macroeconomics

Credit Hours: 3.00. Introduction to macroeconomic theory. The course develops a theoretical framework permitting an analysis of the forces affecting national income, employment, interest rates, and the rate of inflation. Emphasis is placed upon the role of government fiscal and monetary policy in promoting economic growth and stable prices. Typically offered Fall Spring Summer.
CTL:ISH 1041 Macroeconomics

- English Selective - Choose any 20000 or above ENGL course - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00 - 3.00

14-15 Credits

Notes

*Satisfies a University Core Requirement.

Students must complete 32 credit hours of 30000 level or higher courses for graduation at Purdue.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Medical Laboratory Sciences, BS

About the Program

Medical Laboratory Science is a branch of health sciences concerned with the performance and analysis of clinical tests on patient tissues, blood and other body fluids. These disease detectives play a critical role in the patient care team by providing vital information concerning the accurate diagnosis and treatment of disease. Working with doctors and nurses, individuals in this profession draw on their critical thinking skills daily to aid in the promotion of patient health and overall well-being.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Medical Laboratory Sciences include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HLSC-BS

MLAB

120 credits

3 years plus 1 year clinical (application required for clinical)

A cumulative GPA of at least 3.00 and a minimum science (CHM, BIOL, PHYS, MA)

GPA of at least 2.75 is required for admission into the clinical year.

Major Requirements (96 credits)

AGRY 32000 - Genetics

Credit Hours: 3.00. The transmission of heritable traits; probability; genotypic-environmental interactions; chromosomal aberrations; polyploidy; gene mutations; genes in populations; the structure and function of nucleic acids; biochemical genetics; molecular genetics; coding. Typically offered Fall Spring.

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 13000 - Introduction To Medical Laboratory Science

Credit Hours: 1.00. An introduction to career opportunities in medical technology. Preprofessional and professional requirements. A survey of the major clinical laboratory departments and their applications to patient care and management. Discussion and interpretation of some of the major diagnostic tests, i.e., for cardiac enzymes, cholesterol, blood cells, diabetes, and drug monitoring. Typically offered Spring.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 33000 - Aspects Of The Medical Technology Laboratory

Credit Hours: 1.00. The role of the medical technologist in the clinical laboratory. Overview of the clinical departments, with an emphasis on disease states and on the procedures and instruments used to perform clinical tests. Special topics and case studies are presented. Provides students with an idea of what to expect during their clinical experiences. Instructors: medical technologists from the affiliated hospital programs. Typically offered Fall.

- HSCI Humanities, Behavior/Social Sciences Selective - select from HSCI list - Credit Hours: 3.00

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Clinical Year (32 credits)

A cumulative GPA of at least 3.00 and a minimum science (CHM, BIOL, PHYS, MA) GPA of at least 2.75 is required to apply for admission into the clinical year.

Student must have at least 88 credits completed prior to the start of the clinical year.

(Course title and number of credits per course listed below vary by clinical location.)

- Clinical Chemistry

- Clinical Hematology
- Clinical Immunohematology
- Clinical Microbiology
- Clinical Serology
- Clinical Urinalysis
- Intro to Laboratory Education & Management
- Special Topics

Required Courses in Other Departments (23-24 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

- [Behavior/Social Science Core] select from University list - Credit Hours: 3.00
- [Humanities Core] select from University list - Credit Hours: 3.00

Electives (0-1 credits)

An Ethics course (such as PHIL 11100 - Ethics or PHIL 27000 - Biomedical Ethics) is highly recommended

All students must complete 32 credits of 300 level or higher courses at Purdue for graduation

120 credits required for Bachelor of Science degree

Note

Medical Laboratory Sciences students graduate in August

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

English Selective List

ENGL 23000 - Great Narrative Works

Credit Hours: 3.00. Reading and discussion of great narratives from Homer's Odyssey to the present, considering works from a variety of cultures and time periods in order to develop an understanding of their ideas, structures, styles, and cultural values. Typically offered Fall Spring Summer.

ENGL 26600 - World Literature: From The Beginnings To 1700 A.D.

Credit Hours: 3.00. (CMPL 26600) World literature in translation. A comparative and chronological survey of the masterpieces of Eastern and Western literature. Typically offered Summer Fall Spring. CCN: IEL 1250 World Literature 1

ENGL 26700 - World Literature: From 1700 A.D. To The Present

Credit Hours: 3.00. (CMPL 26700) World literature in translation. A comparative and chronological survey of the masterpieces of Eastern and Western literature. Typically offered Summer Fall Spring. CCN: IEL 1251 World Literature 2

ENGL 30400 - Advanced Composition

Credit Hours: 3.00. Designed for students who wish additional training in composition beyond the basic requirements. Extensive practice in the writing of mature expository, critical, and argumentative prose. (The course satisfies the Indiana certification requirement of three hours of advanced composition.). Typically offered Fall Spring Summer.

ENGL 30600 - Introduction To Professional Writing

Credit Hours: 3.00. Development of skill in analyzing rhetorical situations in the workplace. Practice in planning, writing, evaluating, and revising a variety of documents typical of those used in the arts and industry. Typically offered Summer Fall Spring.

ENGL 42000 - Business Writing

Credit Hours: 3.00. Workplace writing in networked environments for management contexts. Emphasizes organizational context, project planning, document management, ethics, research, team writing. Typical genres include management memos, reports, letters, e-mail, resumes (print and online), oral presentations. Typically offered Summer Fall Spring.

ENGL 42100 - Technical Writing

Credit Hours: 3.00. Workplace writing in networked environments for technical contexts. Emphasizes context and user analysis, data analysis/display, project planning, document management, usability, ethics, research, team writing. Typical genres include technical reports, memos, documentation, Web sites. Typically offered Fall Spring Summer.

HSCI Humanities, Behavioral/Social Sciences Selectives List - select any course(s) from the following subjects

- Anthropology (ANTH)
- Art & Design (AD)
- Classics (CLCS)

- Communication (COM)
- Dance (DANC)
- Economics (ECON)
- English (ENGL)
- Foreign Languages & Literatures (FLL)
- History (HIST)
- Interdisciplinary Studies (IDIS)
- Music (MUS)
- Philosophy (PHIL)
- Political Science (POL)
- Psychology (PSY)
- Sociology (SOC)
- Theatre (THTR)

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

16-17 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative

and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

HSCI 13000 - Introduction To Medical Laboratory Science

Credit Hours: 1.00. An introduction to career opportunities in medical technology. Preprofessional and professional requirements. A survey of the major clinical laboratory departments and their applications to patient care and management. Discussion and interpretation of some of the major diagnostic tests, i.e., for cardiac enzymes, cholesterol, blood cells, diabetes, and drug monitoring. Typically offered Spring.

15 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701= CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation,

identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

- Humanities Selective - Credit Hours: 3.00 - (Select from University list) *

15 Credits

Spring 2nd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

- Humanities BSS Selective - Credit Hours: 3.00 - (Select from University list) *
- Elective - Credit Hours: 0.00 - 1.00

14-15 Credits

Fall 3rd Year

AGRY 32000 - Genetics

Credit Hours: 3.00. The transmission of heritable traits; probability; genotypic-environmental interactions; chromosomal aberrations; polyploidy; gene mutations; genes in populations; the structure and function of nucleic acids; biochemical genetics; molecular genetics; coding. Typically offered Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- HSCI Humanities Selective - Credit Hours: 3.00 - (Select from HSCI list)

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

13 Credits

Spring 3rd Year

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

HSCI 13100 - Introduction To Medical Terminology

Credit Hours: 2.00. This self-paced learning course is designed to familiarize the student with terms used in medicine. Each body system will be studied individually. Word roots, prefixes, and suffixes will be used to build words relating to the system. Diagnostic and symptomatic terms will be introduced. Typically offered Fall Spring. CTL:IPO 1820 Medical Terminology

HSCI 33300 - Introduction To Immunology

Credit Hours: 2.00. An introduction to the various aspects of the immune system. Students will become familiar with components of the immune system and their interactions. Emphasis on clinical applications. Various diseases will be discussed as they relate to the immune system. Typically offered Spring.

- English Selective - Credit Hours: 3.00

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

14 Credits

Fall 4th Year

- HSCI courses - 10000-59999 - Credit Hours: ^16.00

16 Credits

Spring 4th Year

- HSCI courses - 10000-59999 - Credit Hours: ^16.00

16 Credits

Note

^Clinical coursework in Chemistry, Hematology, Serology, Immunohematology, Microbiology, Urinalysis, and special topics such as: Laboratory Management, Parasitology, etc. The course titles and credits may vary depending on the affiliate site but will adhere to the overall total of 32 credits at the 40000 level.

***Satisfies a University Core Requirement.**

Students must complete 32 credit hours of 30000 level of higher courses for graduation at Purdue.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Occupational Health Science, BS

About the Program

Occupational Health Science is a science dedicated to the anticipation, recognition, evaluation, and control of hazards in the workplace. The industrial hygienist performs qualitative and quantitative workplace exposure assessments of adverse chemical, physical, radiological, and biological agents. The goal of occupational health science is to control such exposures to prevent fatalities, injuries, and/or illnesses that impact the health, performance and well-being of workers. At Purdue the occupational health science program emphasis is on exposure assessment and use of engineering controls to eliminate such hazards.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 HLTH-Occupational Health Science include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HLTH-BS
OCCH
120 credits

Major Requirements (89 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that

emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CE 35000 - Introduction To Environmental And Ecological Engineering

Credit Hours: 3.00. Introduction to water pollution, air pollution, noise, hazardous and solid wastes, and their control. Environmental impact statements and global pollution issues. Field trips required. Typically offered Fall Spring Summer.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 32100 - Analytical Chemistry I

Credit Hours: 4.00. Quantitative measurements on complex chemical systems that show matrix effects or require isolation of a component prior to its determination; general approaches to quantitative problems at the trace level; critical comparisons of competitive procedures with emphasis on principles of separation processes, including chromatography; recognition and evaluation of possible sources of error; approaches for optimizing conditions so as to minimize time and/or effort required to attain prescribed levels of accuracy and precision. Required of students majoring in chemistry. Typically offered Fall.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HK 44500 - Principles Of Epidemiology

Credit Hours: 3.00. The study of the distribution of diseases in human populations and factors that influence these distributions. Typically offered Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological

Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 34500 - Introduction To Occupational And Environmental Health Sciences

Credit Hours: 3.00. Principles of occupational health (industrial hygiene) and environmental health as related to anticipation, recognition, evaluation, and control of hazards in the workplace and the surrounding community. Emphasis is on hazards of chemicals and their role in occupationally and environmentally related diseases. Historical basis and current legislation are discussed. In addition, the principles of epidemiology, toxicology, exposure standards, and respiratory protection are addressed. Typically offered Fall.

HSCI 34600 - Industrial Hygiene Engineering Control

Credit Hours: 4.00. Study of the various techniques needed to control hazards in the workplace. Major emphasis is placed on developing a working understanding of industrial ventilation, including basic principles of fluid flow, hood and duct design, and system balancing. Effects and control of the physical hazards of noise, vibration, and heat stress are addressed. A field trip to a major industry summarizes the course material. Typically offered Spring.

HSCI 34800 - Industrial Hygiene Instrumentation Techniques

Credit Hours: 3.00. Sophisticated field and laboratory instrumentation and techniques, sampling methodology for organic vapors, dust, fibers, noise, and heat; calibration and validation techniques; emphasis on critical analysis of data. Typically offered Spring.

HSCI 44500 - Industrial Hygiene Internship

Credit Hours: 2.00. Discussion class based on applied work experience as an industrial hygiene assistant or technician at an industrial, consulting, hospital, government, or education and research institution. Topics covered also include professional and ethical aspects derived from students' work experiences. Written and oral reports as well as other classroom assignments. Restricted to industrial hygiene majors who have completed an acceptable industrial hygiene work experience. Typically offered Fall Spring Summer.

HSCI 44600 - Applied Industrial Hygiene

Credit Hours: 3.00. This course allows the student to synthesize his or her basic industrial hygiene fundamentals to understand how they apply in the real world. Issues faced by industrial hygienists will be addressed by a variety of guest speakers. Class projects add to the diversity of this senior capstone course. Typically offered Fall.

HSCI 56000 - Toxicology

Credit Hours: 3.00. (MCMP 56000) Introduction to general principles of toxicology, target organ toxicity, and safety evaluation. Covers toxicity of metals, solvents, pesticides, gases, dusts, and food additives. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

- HSCI Humanities, Behavior/Social Sciences Selective - select from HSCI list - Credit Hours: 3.00

IT 35100 - Advanced Industrial Safety And Health Management

Credit Hours: 3.00. An introduction to OSHA and standards development for occupational health in general industry. Special emphasis is on fire protection and egress, flammable and combustible liquids, electrical, personal protective equipment, machine guarding, industrial hygiene/blood borne pathogens, ergonomics, and ISO 9000/14000 integration. Typically offered Summer Fall Spring.

IT 28100 - Industrial Safety

Credit Hours: 3.00. A course designed to develop understanding of, and insight into, the basic aspects of accident prevention and safety. Specific attention will be given to (1) the psychological aspects of accident prevention; (2) the principles of accident prevention; (3) the practical aspects of planning, implementing, and maintaining a safe environment; and (4) standards, current laws, and regulations. Field trips may be required. Typically offered Fall Spring Summer.

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Required Courses for Other Departments (23-24 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in

agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

POL 22300 - Introduction To Environmental Policy

Credit Hours: 3.00. (FNR 22310) Study of decision making as modern societies attempt to cope with environmental and natural resources problems. Focuses on the American political system, with some attention to the international dimension. Current policies and issues will be examined. Typically offered Fall Spring.

- [Humanities Core] select course from University list - Credit Hours: 3.00

Electives (7-8 credits)

An Ethics course (such as PHIL 11100 - Ethics or PHIL 29000 - Environmental Ethics) is highly recommended.

Note

***A grade of "C" or higher must be earned in HSCI 34500, HSCI 34600, HSCI 34800, HSCI 44600 and HSCI 58000.**

****An internship is strongly recommended but is *not* required; HSCI 44500 can be taken as an elective if the student has had a previous acceptable industrial hygiene work experience.**

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation

120 credits required for Bachelor of Science degree

HSCI Humanities, Behavioral/Social Sciences Selectives List - select any course(s) from the following subjects

- Anthropology (ANTH)
- Art & Design (AD)
- Classics (CLCS)
- Communication (COM)
- Dance (DANC)
- Economics (ECON)
- English (ENGL)
- Foreign Languages & Literatures (FLL)
- History (HIST)
- Interdisciplinary Studies (IDIS)
- Music (MUS)
- Philosophy (PHIL)
- Political Science (POL)
- Psychology (PSY)
- Sociology (SOC)
- Theatre (THTR)

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in

agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

16-17 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

14 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

16 Credits

Spring 2nd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 32100 - Analytical Chemistry I

Credit Hours: 4.00. Quantitative measurements on complex chemical systems that show matrix effects or require isolation of a component prior to its determination; general approaches to quantitative problems at the trace level; critical comparisons of competitive procedures with emphasis on principles of separation processes, including chromatography; recognition and evaluation of possible sources of error; approaches for optimizing conditions so as to minimize time and/or effort required to attain prescribed levels of accuracy and precision. Required of students majoring in chemistry. Typically offered Fall.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

15 Credits

Fall 3rd Year

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

HSCI 34500 - Introduction To Occupational And Environmental Health Sciences

Credit Hours: 3.00. Principles of occupational health (industrial hygiene) and environmental health as related to anticipation, recognition, evaluation, and control of hazards in the workplace and the surrounding community. Emphasis is on hazards of chemicals and their role in occupationally and environmentally related diseases. Historical basis and current legislation are

discussed. In addition, the principles of epidemiology, toxicology, exposure standards, and respiratory protection are addressed. Typically offered Fall.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

OLS 27400 - Applied Leadership

Credit Hours: 3.00. Introduction to applied leadership in the context of organizational functions, structures, and operation. Typically offered Fall Spring Summer.

IT 35100 - Advanced Industrial Safety And Health Management

Credit Hours: 3.00. An introduction to OSHA and standards development for occupational health in general industry. Special emphasis is on fire protection and egress, flammable and combustible liquids, electrical, personal protective equipment, machine guarding, industrial hygiene/blood borne pathogens, ergonomics, and ISO 9000/14000 integration. Typically offered Summer Fall Spring.

IT 28100 - Industrial Safety

Credit Hours: 3.00. A course designed to develop understanding of, and insight into, the basic aspects of accident prevention and safety. Specific attention will be given to (1) the psychological aspects of accident prevention; (2) the principles of accident prevention; (3) the practical aspects of planning, implementing, and maintaining a safe environment; and (4) standards, current laws, and regulations. Field trips may be required. Typically offered Fall Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

15 Credits

Spring 3rd Year

HSCI 34600 - Industrial Hygiene Engineering Control

Credit Hours: 4.00. Study of the various techniques needed to control hazards in the workplace. Major emphasis is placed on developing a working understanding of industrial ventilation, including basic principles of fluid flow, hood and duct design, and system balancing. Effects and control of the physical hazards of noise, vibration, and heat stress are addressed. A field trip to a major industry summarizes the course material. Typically offered Spring.

HSCI 34800 - Industrial Hygiene Instrumentation Techniques

Credit Hours: 3.00. Sophisticated field and laboratory instrumentation and techniques, sampling methodology for organic vapors, dust, fibers, noise, and heat; calibration and validation techniques; emphasis on critical analysis of data. Typically offered Spring.

POL 22300 - Introduction To Environmental Policy

Credit Hours: 3.00. (FNR 22310) Study of decision making as modern societies attempt to cope with environmental and natural resources problems. Focuses on the American political system, with some attention to the international dimension. Current policies and issues will be examined. Typically offered Fall Spring.

- Humanities Selective - Credit Hours: 3.00 - (Select from University list) *

CE 35000 - Introduction To Environmental And Ecological Engineering

Credit Hours: 3.00. Introduction to water pollution, air pollution, noise, hazardous and solid wastes, and their control. Environmental impact statements and global pollution issues. Field trips required. Typically offered Fall Spring Summer.

16 Credits

Fall 4th Year

HK 44500 - Principles Of Epidemiology

Credit Hours: 3.00. The study of the distribution of diseases in human populations and factors that influence these distributions. Typically offered Fall Spring.

HSCI 44500 - Industrial Hygiene Internship

Credit Hours: 2.00. Discussion class based on applied work experience as an industrial hygiene assistant or technician at an

industrial, consulting, hospital, government, or education and research institution. Topics covered also include professional and ethical aspects derived from students' work experiences. Written and oral reports as well as other classroom assignments. Restricted to industrial hygiene majors who have completed an acceptable industrial hygiene work experience. Typically offered Fall Spring Summer.

- Elective - Credit Hours: 2.00

HSCI 44600 - Applied Industrial Hygiene

Credit Hours: 3.00. This course allows the student to synthesize his or her basic industrial hygiene fundamentals to understand how they apply in the real world. Issues faced by industrial hygienists will be addressed by a variety of guest speakers. Class projects add to the diversity of this senior capstone course. Typically offered Fall.

HSCI 56000 - Toxicology

Credit Hours: 3.00. (MCMP 56000) Introduction to general principles of toxicology, target organ toxicity, and safety evaluation. Covers toxicity of metals, solvents, pesticides, gases, dusts, and food additives. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

14 Credits

Spring 4th Year

- English Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- HSCI Humanities Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00 - 2.00

13-14 Credits

University Foundations Learning Outcome List

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Note

***Satisfies a University Core Requirement.**

****Must earn a grade of at least a C in HSCI 34500, HSCI 34600, HSCI 34800, HSCI 44600, and HSCI 58000.**

Students must complete 32 credit hours of 30000 level or higher courses for graduation at Purdue

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Radiological Health Sciences-Health Physics, BS

About the Program

Radiation is all around us and is used to generate power, analyze samples and materials, diagnose medical conditions and treat cancer. These powerful tools require trained individuals (radiation safety officer/health physicist/medical physicist) to protect patients, medical staff and the public from unnecessary exposure to radiation. A radiation safety officer within an organization is responsible for the safe use of radiation and radioactive materials as well as regulatory compliance. A trained health physicist evaluates the radiation environment using instruments and calculations and works with regulatory authorities to ensure compliance with radiation exposure standards. Medical physicists work closely with physicians and patients to develop radiation therapy treatments that minimize side effects while effectively treating cancer.

Summary of Program Requirements

The Summary of Program Requirements for 2016-17 Radiological Health Sciences/Health Physics Concentration is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

HLSC-BS
RADH-HLPH
120 credits

Major Requirements (93-94 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 31200 - Radiation Science Fundamentals

Credit Hours: 3.00. This course introduces principles and concepts related to nuclear energetics, radioactive decay, the interactions of ionizing radiation with matter, and the human health effects of exposure to ionizing radiation. Fundamental concepts related to atomic and sub-atomic physical processes as well as relevant aspects of modern physics are briefly reviewed. Students gain practical experience and enhance their understanding of radiation protection by participating in a radiological emergency response exercise (RERE). Typically offered Fall.

HSCI 31300 - Principles Of Radiation Detection And Measurement

Credit Hours: 2.00. Course presents an introduction to the principles of radiation detection and measurement, including statistical models, counting statistics, error analysis, detection limits, ionization chambers, proportional counters, GM counters, scintillation counters, gamma-ray spectroscopy, solid-state detectors, TLDs, track-etch and bubble detectors. Typically offered Fall.

HSCI 51400 - Radiation Instrumentation Laboratory

Credit Hours: 2.00. Laboratory techniques required for the application of radiation and radionuclides. Typically offered Spring.

HSCI 52600 - Principles Of Health Physics And Dosimetry

Credit Hours: 3.00. Principles of health physics, radiation dosimetry, and radiation shielding. Topics covered include natural and man-made radiation environments, operational radiation quantities and units, radiation protection philosophy, risk and dose limits, dose-response models, mortality estimates and risk calculations. Typically offered Fall.

HSCI 53400 - Applied Health Physics

Credit Hours: 3.00. Lecture and case studies related to the application of radiation dosimetry and shielding principles to the practice of health physics, including environmental and in-plant monitoring, emergency response, decommissioning and decontamination, operational criteria for meeting ALARA exposure limits, and the transport, disposal and treatment of radioactive waste. Epidemiological studies related to radiological accidents and nuclear power are also examined. Typically offered Spring.

HSCI 54000 - Radiation Biology

Credit Hours: 3.00. Effects of ionizing radiation on living systems at the molecular, cellular and tissue levels. Biological basis for radiation therapy treatment planning and radiation protection. Typically offered Spring.

HSCI 57400 - Medical Health Physics

Credit Hours: 2.00. This course introduces the legislation and international and national recommendations relevant to the practice of radiation protection in medicine. Principles for the design of radiation use monitoring programs and shielding for radiation facilities is covered. Radiation risk avoidance and management for staff, patients and their families, and members of the public are discussed. Typically offered Fall.

MA 16200 - Plane Analytic Geometry And Calculus II

Credit Hours: 5.00. Continuation of MA 16100. Vectors in two and three dimensions, techniques of integration, infinite series, conic sections, polar coordinates, surfaces in three dimensions. Some schools or departments may allow only 4 credit hours toward graduation for this course. Typically offered Fall Spring Summer.

MA 16600 - Analytic Geometry And Calculus II

Credit Hours: 4.00. Continuation of MA 16500. Vectors in two and three dimensions. Techniques of integration, infinite series, polar coordinates, surfaces in three dimensions. Not open to students with credit in MA 16200. Typically offered Fall Spring.
CTL:IMA 1603 Calculus - Long II

MA 26100 - Multivariate Calculus

Credit Hours: 4.00. Planes, lines, and curves in three dimensions. Differential calculus of several variables; multiple integrals. Introduction to vector calculus. Not open to students with credit in MA 17400 or MA 27100 . Typically offered Fall Spring Summer.

NUCL 20000 - Introduction to Nuclear Engineering

Credit Hours: 3.00. A course designed to acquaint students with the field of nuclear engineering and design. Concepts of fission, fusion, radioactivity, and neutron physics are introduced. Modern applications of nuclear technology, including nuclear medicine, food preservation, space reactors and propulsion. Typically offered Fall Spring.

NUCL 20500 - Nuclear Engineering Undergraduate Laboratory I

Credit Hours: 2.00. A laboratory course designed for the study of the properties of radiation, radioactive material, and radiation detectors. The hazards of radiation and safe handling techniques are emphasized. Typically offered Spring.

NUCL 30500 - Nuclear Engineering Undergraduate Laboratory II

Credit Hours: 2.00. Continuation of NUCL 20500. Experiments with scintillation detectors, multichannel analyzers, neutron detectors, the subcritical pile, and the reactor will be performed. Measurements will be made to demonstrate neutron activation analysis techniques, neutron slowing down, neutron flux distributions, and the effects of control rods on neutron fluxes. Typically offered Fall.

PHYS 17200 - Modern Mechanics

Credit Hours: 4.00. Introductory calculus-based physics course using fundamental interactions between atoms to describe Newtonian mechanics, conservation laws, energy quantization, entropy, the kinetic theory of gases, and related topics in mechanics and thermodynamics. Emphasis is on using only a few fundamental principles to describe physical phenomena extending from nuclei to galaxies. 3-D graphical simulations and numerical problem solving by computer are employed by the student from the very beginning. Typically offered Summer Fall Spring. CTL:IPS 1753 Calculus-based Physics I

PHYS 24100 - Electricity And Optics

Credit Hours: 3.00. Electrostatics, current electricity, electromagnetism, magnetic properties of matter. Electromagnetic waves, geometrical and physical optics. Typically offered Summer Fall Spring.

PHYS 34000 - Modern Physics Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany PHYS 34200 or PHYS 34400. Typically offered Fall Spring.

PHYS 34200 - Modern Physics

Credit Hours: 3.00. A survey of basic concepts and phenomena in atomic, nuclear, and solid-state physics. Typically offered Fall.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- General Science or Radiological Health Sciences Selective - select from list - Credit Hours: 3.00
- Health Physics Selective - select from list - Credit Hours: 3.00
- Health Physics Selective - select from list - Credit Hours: 3.00
- HSCI Humanities, Behavioral/Social Sciences Selective - select from HSCI list - Credit Hours: 3.00
- Math-Computer Science Selective - select from list - Credit Hours: 3.00
- Math-Computer Science or General Science Selective - select from list - Credit Hours: 4.00

Required Courses in Other Departments (24-26 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from

interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16100 - Plane Analytic Geometry And Calculus I

Credit Hours: 5.00. Introduction to differential and integral calculus of one variable, with applications. Some schools or departments may allow only 4 credit hours toward graduation for this course. Designed for students who have not had at least a one-semester calculus course in high school, with a grade of "A" or "B". Not open to students with credit in MA 16500. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring Summer.

MA 16500 - Analytic Geometry And Calculus I

Credit Hours: 4.00. Introduction to differential and integral calculus of one variable, with applications. Conic sections. Designed for students who have had at least a one-semester calculus course in high school, with a grade of "A" or "B", but are not qualified to enter MA 16200 or MA 16600, or the advanced placement courses MA 17300 or MA 27100, or the honors calculus course MA 18100. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring. CTL:IMA 1602 Calculus - Long I

- [Behavior/Social Science Core] select course from University list - Credit Hours: 3.00
- [Humanities Core] select course from University list - Credit Hours: 3.00

Electives (0-3 credits)

Note

Must earn a grade of "C" or higher in HSCI 31200 HSCI 31300, HSCI 51400, HSCI 52600, HSCI 53400, HSCI 54000, and HSCI 57400.

An Ethics course (such as PHIL 11100 - Ethics or PHIL 29000 - Environmental Ethics) is highly recommended.

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation

120 credits required for Bachelor of Science degree

General Science Selective List

AT 57200 - Human Error And Safety

Credit Hours: 3.00. Explores the definition and nature of human error, error chains, and causal factors in error generation. Error taxonomies are reviewed in order to provide a classification scheme for grouping errors and assessing error criticality. Methods for assessing risk and predicting error generation potentials are learned, as well as strategies for controlling or eliminating errors. Case studies are utilized throughout the course to illustrate course concepts. Permission of instructor required. Typically offered Fall Spring.

BIOL 41500 - Introduction To Molecular Biology

Credit Hours: 3.00. An introduction to modern molecular biology techniques and how they are used to address current topics in gene regulation. Emphasis will be placed on experimental procedures and model systems, such as site-directed mutagenesis of isolated genes and their subsequent introduction into prokaryotic and eukaryotic cells. Topics will address the molecular control mechanisms associated with DNA replication, RNA transcription, RNA processing, and differential gene expression. Typically offered Fall.

BIOL 44400 - Human Genetics

Credit Hours: 3.00. An intermediate-level survey course of human genetics with a balanced review of both Mendelian and molecular aspects. Review of current development and application of DNA technology emphasized. Typically offered Fall.

BIOL 51600 - Molecular Biology Of Cancer

Credit Hours: 3.00. A detailed course examining the molecular mechanisms controlling the growth of animal cells. Emphasis will be placed on current experimental approaches to defining the molecular basis of growth regulation in developing systems and the uncontrolled proliferation of cells in metabolic disorders, such as cancer. Typically offered Spring.

BIOL 54200 - Modular Upper-Division Laboratory Course

Credit Hours: 1.00 or 2.00. This is a project-oriented course designed to give the student exposure to laboratory research through

a series of 5-week modules. The student must complete the introductory 5-week module or have the consent of the instructor before taking the other modules. Topics may include animal cell culture, cloning and blot analysis, DNA fingerprinting, analysis of nucleic acid sequences, animal physiology, bacterial genetics, advanced neurophysiology, chromatin structure, eukaryotic gene expression, genomics, yeast molecular biology, and molecular virology, etc. Typically offered Fall Spring.

CHM 22400 - Introductory Quantitative Analysis

Credit Hours: 4.00. Introduction to titrimetric, gravimetric, and instrumental methods of analysis; principles of separation processes, including chromatography; recognition and evaluation of possible sources of error. Required of students majoring in biology who do not take CHM 32100. Typically offered Spring.

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

HK 44500 - Principles Of Epidemiology

Credit Hours: 3.00. The study of the distribution of diseases in human populations and factors that influence these distributions. Typically offered Fall Spring.

HSCI 34500 - Introduction To Occupational And Environmental Health Sciences

Credit Hours: 3.00. Principles of occupational health (industrial hygiene) and environmental health as related to anticipation, recognition, evaluation, and control of hazards in the workplace and the surrounding community. Emphasis is on hazards of chemicals and their role in occupationally and environmentally related diseases. Historical basis and current legislation are discussed. In addition, the principles of epidemiology, toxicology, exposure standards, and respiratory protection are addressed. Typically offered Fall.

HSCI 54700 - Fundamentals Of Epidemiology

Credit Hours: 3.00. This course is an introduction to epidemiology, which is the study of the patterns, causes, and impact of disease in populations. Epidemiology is increasingly important for public health and clinical medicine research and policy. This course will discuss the basic principles and methods of epidemiology, including measurements of disease occurrence and association, study designs, and determination of causality. Contemporary examples will be used to illustrate the application of these concepts, with an emphasis on environmental causes of disease. Typically offered Fall.

HSCI 55100 - Physical Agents In Environmental Health

Credit Hours: 3.00. Physical characterization and biological interactions of nonionizing radiation with emphasis on the adverse effects of human exposure. Topics include source characterization, environmental exposure assessment, measurement instrumentation, toxicological and epidemiological findings, control strategies. Typically offered Spring.

HSCI 55200 - Introduction To Aerosol Science

Credit Hours: 3.00. The principles of aerosol behavior and sampling, with particular emphasis on applications in the health sciences. Topics include aerosol aerodynamics, aerosol filtration, pulmonary deposition of aerosols, methods of environmental sampling, and generation of laboratory aerosols. Typically offered Fall Spring.

HSCI 56000 - Toxicology

Credit Hours: 3.00. (MCMP 56000) Introduction to general principles of toxicology, target organ toxicity, and safety evaluation. Covers toxicity of metals, solvents, pesticides, gases, dusts, and food additives. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

PHIL 27000 - Biomedical Ethics

Credit Hours: 3.00. An examination of the moral problems raised by developments in medicine and the biomedical sciences. Topics include abortion, reproductive technologies, euthanasia and physician-assisted suicide, experiments involving human subjects, and health care delivery. Typically offered Fall Spring.

PHIL 29000 - Environmental Ethics

Credit Hours: 3.00. An introduction to philosophical issues surrounding debates about the environment and our treatment of it. Topics may include endangered species, "deep ecology," the scope and limits of cost-benefit analyses, and duties to future generations. Typically offered Fall Spring.

PHIL 35000 - Philosophy And Probability

Credit Hours: 3.00. This course introduces the student to mathematical probability and its philosophical applications. Topics may include theories of probability, Hume's problem of induction, Goodman's paradox, and the foundations of scientific reasoning. Typically offered Spring Fall.

PHYS 22000 - General Physics

Credit Hours: 4.00. Mechanics, heat, and sound, for students not specializing in physics. Typically offered Fall Spring Summer. CTL:IPS 1751 Algebra-based Physics I

PHYS 22100 - General Physics

Credit Hours: 4.00. Electricity, light, and modern physics, for students not specializing in physics. Typically offered Fall Spring Summer. CTL:IPS 1752 Algebra-based Physics II

PHYS 31000 - Intermediate Mechanics

Credit Hours: 4.00. For students familiar with calculus. Elements of vector algebra; statics of particles and rigid bodies; theory of couples; principle of virtual work; kinematics; dynamics of particles and rigid bodies; work, power, and energy. Typically offered Fall.

PHYS 36000 - Quantum Mechanics

Credit Hours: 3.00. Historical development of quantum mechanics, wave packets, uncertainty principle, Schrödinger equation, operators, the hydrogen atom, electron spin, angular momentum, perturbation theory, and other selected topics. Typically offered Spring.

PHYS 55000 - Introduction To Quantum Mechanics

Credit Hours: 3.00. Brief historical survey of the development of quantum mechanics; wave-packets, uncertainty principle, wave functions, operators, Schrödinger equation with application to one-dimensional problems, the hydrogen atom, electron spin, selected topics in perturbation theory, scattering theory, and compounding of angular momenta. Not available for students with credit in PHYS 36000 or PHYS 46000. Typically offered Fall.

PHYS 55600 - Introductory Nuclear Physics

Credit Hours: 3.00. Theory of relativity, brief survey of systematics of nuclei and elementary particles, structure of stable nuclei, radioactivity, interaction of nuclear radiation with matter, nuclear reactions, particle accelerators, nuclear instruments, fission, nuclear reactors. Typically offered Spring.

PHYS 56400 - Introduction To Elements Particle Physics

Credit Hours: 3.00. This course brings students up to the current status of research in elementary particle physics. The focus of the course is the construction of the Standard Model with emphasis on the electroweak theory. The seminal experiments that confirmed the predictions of the Standard Model is presented. The solar neutrino problem, the search for nonzero neutrino masses, and the efforts to construct a theory which unifies all interactions, including gravity, is discussed. Typically offered Spring.

PHYS 56500 - Introduction To Elementary Particle Physics II

Credit Hours: 3.00. This course follows PHYS 56400, and it continues to present current topics in elementary particle physics. It focuses on the Higgs mechanism, and it explores physics beyond the standard model. Special attention is devoted to supersymmetry and searches for new particles. Typically offered Spring.

Health Physics Selective List

HSCI 39000 - Special Topics

Credit Hours: 1.00 to 8.00. Special topics, projects, or readings in selected areas of health sciences at a level appropriate for junior students. Permission of instructor required. Typically offered Summer Fall Spring.

HSCI 48500 - Health Physics Internship

Credit Hours: 1.00 to 8.00. Applied work experience as a health physics assistant or technician at a nuclear power generating station, government laboratory, hospital, or education and research institution. Permission of instructor required. Typically offered Summer Fall Spring.

HSCI 54700 - Fundamentals Of Epidemiology

Credit Hours: 3.00. This course is an introduction to epidemiology, which is the study of the patterns, causes, and impact of disease in populations. Epidemiology is increasingly important for public health and clinical medicine research and policy. This course will discuss the basic principles and methods of epidemiology, including measurements of disease occurrence and association, study designs, and determination of causality. Contemporary examples will be used to illustrate the application of these concepts, with an emphasis on environmental causes of disease. Typically offered Fall.

HSCI 55100 - Physical Agents In Environmental Health

Credit Hours: 3.00. Physical characterization and biological interactions of nonionizing radiation with emphasis on the adverse effects of human exposure. Topics include source characterization, environmental exposure assessment, measurement instrumentation, toxicological and epidemiological findings, control strategies. Typically offered Spring.

HSCI 55200 - Introduction To Aerosol Science

Credit Hours: 3.00. The principles of aerosol behavior and sampling, with particular emphasis on applications in the health sciences. Topics include aerosol aerodynamics, aerosol filtration, pulmonary deposition of aerosols, methods of environmental sampling, and generation of laboratory aerosols. Typically offered Fall Spring.

HSCI 59000 - Special Topics

Credit Hours: 1.00 to 8.00. Special topics, projects, or readings in selected areas of health sciences at a level appropriate for seniors and graduate students. Permission of instructor required. Typically offered Spring Fall Summer.

ME 20000 - Thermodynamics I

Credit Hours: 3.00. First and second laws of thermodynamics, entropy, reversible and irreversible processes, properties of pure substances. Application to engineering problems. Typically offered Spring Summer Fall.

ME 27000 - Basic Mechanics I

Credit Hours: 3.00. Vector operations, forces and couples, free body diagrams, equilibrium of a particle and of rigid bodies. Friction. Distributed forces. Centers of gravity and centroids. Applications from structural and machine elements, such as bars, trusses, and friction devices. Kinematics and equations of motion of a particle for rectilinear and curvilinear motion. Typically offered Fall Spring Summer.

NRES 28000 - Hazardous Waste Handling

Credit Hours: 3.00. This course satisfies the OSHA standards for completion of the 40-hour Hazardous Waste Operator/Emergency Response Technician certification, 29CFR1910.120. The course includes a 35 hours laboratory component that presents hands-on field exercises and a supervised environmental project. The environmental project provides the on-the-job experience required by OSHA for full certification. The course provides students with the information they need to protect themselves and others at the job site and gives students experience in making decisions, performing tasks, and using the equipment they will encounter in the environmental workplace. Typically offered Fall Spring.

NUCL 30000 - Nuclear Structure And Radiation Interactions

Credit Hours: 3.00. Review of atomic properties and introduction to nuclear models. Discussion of radioactive decay and the interaction of nuclear radiation and reaction products with matter. Energetics and cross-sections of nuclear reactions with applications to problems typical of nuclear engineering. Typically offered Fall.

NUCL 31000 - Introduction To Neutron Physics

Credit Hours: 3.00. Development of diffusion theory for neutrons. Neutron interactions and development of one-group neutron diffusion theory with point, plane, and fission sources. Application to one- and two-region reactors. Introduction to buckling, multiplication constants, critical size, neutron slowing down, and resonance capture. Applications using two-group theory. Typically offered Spring.

NUCL 35000 - Nuclear Thermal-Hydraulics I

Credit Hours: 3.00. The first of an integrated two-course sequence introducing the concepts of nuclear reactor thermal transport and associated hydraulics with applications to design and safety. Macroscopic balances, dimensional analysis, and flow measurement. Fluid behavior, momentum transfer, and applications to reactor systems and design. Typically offered Fall.

NUCL 35100 - Nuclear Thermal-Hydraulics II

Credit Hours: 3.00. Emphasis is given to the fluid transport of heat from reactor fuel elements. Heat transfer in fluids, analogies, and applications to reactor coolant channel analysis. Two-phase flow and convective boiling. Radiative heat transfer. Applications to safety analysis and reactor design. Typically offered Spring.

NUCL 50100 - Nuclear Engineering Principles

Credit Hours: 3.00. A first course for graduate students desiring a nuclear engineering sequence and an elective for students in science or engineering. The course is structured in four parts: (1) Nuclear structure and radiation, biological effects and medical applications of radiation. (2) Basics of neutron and reactor physics, neutron diffusion and reactor criticality. (3) Nuclear materials and waste. (4) Reactor systems and safety. Typically offered Fall.

NUCL 50300 - Radioactive Waste Management

Credit Hours: 3.00. Will familiarize students with the nature of the risks associated with radioactive waste and the history, regulations, and worldwide status for the safe storage of various types of radioactive waste. The sources, characteristics, and magnitudes of radioactive wastes are described, and the current and proposed engineered waste management systems are examined along with the analysis of their associated risks. Typically offered Spring.

NUCL 50400 - Nuclear Engineering Experiments

Credit Hours: 3.00. A laboratory course that, when coupled with NUCL 50100, produces a sequence that contains both the theoretical and engineering aspects of nuclear engineering. Topics include radiation detection and analysis, neutronics, and nuclear reactor experiments. Typically offered Spring.

NUCL 51000 - Nuclear Reactor Theory I

Credit Hours: 3.00. Methodologies of neutron flux calculations, diffusion and slowing down theory, flux separation, material buckling, resonance absorption, Doppler effect, 2-group and multi-group theories, and reactivity balances for design and operation. Introduction to reactor kinetics, delayed neutrons, point reactor kinetics, transient behavior, load changes, reactivity feedback, and safety implications. Typically offered Fall.

HSCI Humanities, Behavioral/Social Sciences Selectives List

select any 10000-59999 course(s) from the following subjects:

- Anthropology (ANTH)
- Art & Design (AD)
- Classics (CLCS)

- Communication (COM)
- Dance (DANC)
- Economics (ECON)
- English (ENGL)
- Foreign Languages & Literatures (FLL)
- History (HIST)
- Interdisciplinary Studies (IDIS)
- Music (MUS)
- Philosophy (PHIL)
- Political Science (POL)
- Psychology (PSY)
- Sociology (SOC)
- Theatre (THTR)

Math-Computer Science Selective List

CS 15800 - C Programming

Credit Hours: 3.00. Introduction to structured programming in C. Data types and expression evaluation. Programmer-defined functions including passing parameters by value and by address. Selection topics include if/else/else-if, conditional expressions, and switch. Repetition topics include while, do-while, for, and recursion. External file input and output. Arrays, analysis of searching and sorting algorithms, and strings. Pointers and dynamic memory allocation. Students are expected to complete assignments in a collaborative environment. CS 15800 may be used to satisfy College of Science requirement of participation in at least one team-building and collaboration experience. Typically offered Summer Fall Spring.

CS 15900 - Programming Applications For Engineers

Credit Hours: 3.00. Fundamental principles, concepts, and methods of programming (C and MATLAB), with emphasis on applications in the physical sciences and engineering. Basic problem solving and programming techniques; fundamental algorithms and data structures; and use of programming logic in solving engineering problems. Students are expected to complete assignments in a collaborative learning environment. Typically offered Summer Fall Spring.

CS 18000 - Problem Solving And Object-Oriented Programming

Credit Hours: 4.00. Problem solving and algorithms, implementation of algorithms in a high level programming language, conditionals, the iterative approach and debugging, collections of data, searching and sorting, solving problems by decomposition, the object-oriented approach, subclasses of existing classes, handling exceptions that occur when the program is running, graphical user interfaces (GUIs), data stored in files, abstract data types, a glimpse at topics from other CS courses. Intended primarily for students majoring in computer sciences. Credit cannot be obtained for both CS 18000 and any of 15600, CS 15800 and CS 15900. Not open to students with credit in CS 18100 or CS 24000. Typically offered Fall Spring.

CS 31400 - Numerical Methods

Credit Hours: 3.00. Iterative methods for solving nonlinear equations; direct and iterative methods for solving linear systems; approximations of functions, derivatives, and integrals; error analysis. Typically offered Spring.

CS 47800 - Introduction to Bioinformatics

Credit Hours: 3.00. (BIOL 47800) Bioinformatics is broadly defined as the study of molecular biological information, targeting particularly the enormous volume of DNA sequence and functional complexity embedded in entire genomes. Topics will include understanding the evolutionary organization of genes (genomics), the structure and function of gene products (proteomics), and the dynamics of gene expression in biological processes (transcriptomics). Inherently, bioinformatics is interdisciplinary, melding various applications of computational science with biology. This jointly taught course introduces analytical methods from biology, statistics and computer science that are necessary for bioinformatics investigations. The course is intended for junior and senior undergraduates from various science backgrounds. Our objective is to develop the skills of both tool users and tool designers in this important new field of research. Typically offered Fall.

MA 26200 - Linear Algebra And Differential Equations

Credit Hours: 4.00. Linear algebra, elements of differential equations. Not open to students with credit in MA 26500 or MA 26600. Typically offered Fall Spring Summer.

MA 41600 - Probability

Credit Hours: 3.00. (STAT 41600) An introduction to mathematical probability suitable as a preparation for actuarial science, statistical theory, and mathematical modeling. General probability rules, conditional probability and Bayes theorem, discrete and continuous random variables, moments and moment generating functions, joint and conditional distributions, standard discrete and continuous distributions and their properties, law of large numbers and central limit theorem. Typically offered Fall Spring.

MA 52700 - Advanced Mathematics For Engineers And Physicists I

Credit Hours: 3.00. MA 52700 is not a prerequisite for MA 52800; these courses can be taken independently. Topics in MA 52700 include linear algebra, systems of ordinary differential equations, Laplace transforms, Fourier series and transforms, and partial differential equations. MA 51100 is recommended. Typically offered Fall.

MA 52800 - Advanced Mathematics For Engineers And Physicists II

Credit Hours: 3.00. MA 52700 is not a prerequisite for MA 52800; these courses can be taken independently. Topics in MA 52800 include divergence theorem, Stokes theorem, complex variables, contour integration, calculus of residues and applications, conformal mapping, and potential theory. MA 51000 is recommended. Typically offered Spring.

PHYS 58000 - Computational Physics

Credit Hours: 3.00. Introduction to computationally based problem solving in physics, emphasis on understanding and applying various numerical algorithms to different types of physics problems. Topics will include chaos in mechanical systems, stochastic systems including percolation and fractal structures, molecular dynamics and the properties of simple fluids, Monte Carlo methods and phase transitions, and time dependent as well as time dependent problems in quantum mechanics. Typically offered Fall.

STAT 31100 - Introductory Probability

Credit Hours: 3.00. Formulation of probability problems, discrete and continuous random variables, expectation, standard distributions, applications to statistical problems, and problems in the physical sciences. Credit cannot be given for more than one of STAT 22500, 31100, or STAT 41600. Prerequisite: two semesters of college calculus. Typically offered Spring.

STAT 51200 - Applied Regression Analysis

Credit Hours: 3.00. Inference in simple and multiple linear regression, residual analysis, transformations, polynomial regression, model building with real data, nonlinear regression. One-way and two-way analysis of variance, multiple comparisons, fixed and random factors, analysis of covariance. Use of existing statistical computer programs. Prerequisite: Coursework in Statistical Methods with a calculus prerequisite. Typically offered Fall Spring Summer.

Radiological Health Sciences Selective List for HLPH

Any course on the Health Physics Selective List

HSCI 19000 - Special Topics

Credit Hours: 1.00 to 8.00. Special topics, projects, or readings in selected areas of health sciences at a level appropriate for freshmen students. Permission of instructor required. Typically offered Summer Fall Spring.

HSCI 29000 - Special Topics

Credit Hours: 1.00 to 8.00. Special topics, projects, or readings in selected areas of health sciences at a level appropriate for sophomore students. Permission of instructor required. Typically offered Summer Fall Spring.

HSCI 39000 - Special Topics

Credit Hours: 1.00 to 8.00. Special topics, projects, or readings in selected areas of health sciences at a level appropriate for junior students. Permission of instructor required. Typically offered Summer Fall Spring.

HSCI 49000 - Special Topics

Credit Hours: 1.00 to 8.00. Special topics, projects, or readings in selected areas of health sciences at a level appropriate for senior students. Permission of instructor required. Typically offered Fall Spring.

HSCI 59000 - Special Topics

Credit Hours: 1.00 to 8.00. Special topics, projects, or readings in selected areas of health sciences at a level appropriate for seniors and graduate students. Permission of instructor required. Typically offered Spring Fall Summer.

HSCI 57000 - Introduction To Medical Diagnostic Imaging

Credit Hours: 3.00. This course teaches the fundamentals of medical imaging, including the basic physics and engineering associated with each imaging modality (CT, MRI, PET, and ultrasound), as well as mathematics and computational tools associated with image reconstruction and image processing. The course is intended for students in health sciences, biomedical engineering, physics, and life sciences. Typically offered Spring.

HSCI 57200 - Radiation Oncology Physics

Credit Hours: 3.00. An introductory course to the physical principles, equipment, processes, imaging guidance, and clinical techniques involved in the treatment of cancer patients with external radiation beams and radioactive sources. Various external radiation beam types and their energy deposition characteristics are described. Treatment planning dose calculation algorithms and point dose calculations are discussed. The use of international dosimetry protocols for radiation beam calibration are covered in detail. Typically offered Spring.

HSCI 69000 - Special Topics

Credit Hours: 1.00 to 8.00. Special topics, projects, or readings in selected areas of health sciences at a level appropriate for graduate students. Permission of instructor required. Typically offered Spring Fall Summer.

NUPH 55000 - Introduction To Positron Emission Tomography

Credit Hours: 2.00. Introduction to the principles and applications of positron emission tomography (PET). Topics include: instrumentation; radionuclide production; synthesis and applications of ¹⁵O, ¹¹C, ¹³N, and ¹⁸F radiopharmaceuticals; quantitative tracer kinetic modeling; and regulatory issues in clinical PET. Typically offered Spring.

University Foundations Learning Outcome List

<http://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16500 - Analytic Geometry And Calculus I

Credit Hours: 4.00. Introduction to differential and integral calculus of one variable, with applications. Conic sections. Designed for students who have had at least a one-semester calculus course in high school, with a grade of "A" or "B", but are not qualified to enter MA 16200 or MA 16600, or the advanced placement courses MA 17300 or MA 27100, or the honors calculus course MA 18100. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring. CTL:IMA 1602 Calculus - Long I

MA 16100 - Plane Analytic Geometry And Calculus I

Credit Hours: 5.00. Introduction to differential and integral calculus of one variable, with applications. Some schools or departments may allow only 4 credit hours toward graduation for this course. Designed for students who have not had at least a one-semester calculus course in high school, with a grade of "A" or "B". Not open to students with credit in MA 16500. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring Summer.

17-18 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16600 - Analytic Geometry And Calculus II

Credit Hours: 4.00. Continuation of MA 16500. Vectors in two and three dimensions. Techniques of integration, infinite series, polar coordinates, surfaces in three dimensions. Not open to students with credit in MA 16200. Typically offered Fall Spring.
CTL:IMA 1603 Calculus - Long II

MA 16200 - Plane Analytic Geometry And Calculus II

Credit Hours: 5.00. Continuation of MA 16100. Vectors in two and three dimensions, techniques of integration, infinite series, conic sections, polar coordinates, surfaces in three dimensions. Some schools or departments may allow only 4 credit hours toward graduation for this course. Typically offered Fall Spring Summer.

15-17 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

MA 26100 - Multivariate Calculus

Credit Hours: 4.00. Planes, lines, and curves in three dimensions. Differential calculus of several variables; multiple integrals. Introduction to vector calculus. Not open to students with credit in MA 17400 or MA 27100 . Typically offered Fall Spring Summer.

PHYS 17200 - Modern Mechanics

Credit Hours: 4.00. Introductory calculus-based physics course using fundamental interactions between atoms to describe Newtonian mechanics, conservation laws, energy quantization, entropy, the kinetic theory of gases, and related topics in mechanics and thermodynamics. Emphasis is on using only a few fundamental principles to describe physical phenomena extending from nuclei to galaxies. 3-D graphical simulations and numerical problem solving by computer are employed by the student from the very beginning. Typically offered Summer Fall Spring. CTL:IPS 1753 Calculus-based Physics I

15 Credits

Spring 2nd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

NUCL 20000 - Introduction to Nuclear Engineering

Credit Hours: 3.00. A course designed to acquaint students with the field of nuclear engineering and design. Concepts of fission, fusion, radioactivity, and neutron physics are introduced. Modern applications of nuclear technology, including nuclear medicine, food preservation, space reactors and propulsion. Typically offered Fall Spring.

NUCL 20500 - Nuclear Engineering Undergraduate Laboratory I

Credit Hours: 2.00. A laboratory course designed for the study of the properties of radiation, radioactive material, and radiation detectors. The hazards of radiation and safe handling techniques are emphasized. Typically offered Spring.

- Elective - Credit Hours: 1.00

13 Credits

Fall 3rd Year

HSCI 31200 - Radiation Science Fundamentals

Credit Hours: 3.00. This course introduces principles and concepts related to nuclear energetics, radioactive decay, the interactions of ionizing radiation with matter, and the human health effects of exposure to ionizing radiation. Fundamental concepts related to atomic and sub-atomic physical processes as well as relevant aspects of modern physics are briefly reviewed. Students gain practical experience and enhance their understanding of radiation protection by participating in a radiological emergency response exercise (RERE). Typically offered Fall.

HSCI 31300 - Principles Of Radiation Detection And Measurement

Credit Hours: 2.00. Course presents an introduction to the principles of radiation detection and measurement, including statistical models, counting statistics, error analysis, detection limits, ionization chambers, proportional counters, GM counters, scintillation counters, gamma-ray spectroscopy, solid-state detectors, TLDs, track-etch and bubble detectors. Typically offered Fall.

NUCL 30500 - Nuclear Engineering Undergraduate Laboratory II

Credit Hours: 2.00. Continuation of NUCL 20500. Experiments with scintillation detectors, multichannel analyzers, neutron detectors, the subcritical pile, and the reactor will be performed. Measurements will be made to demonstrate neutron activation analysis techniques, neutron slowing down, neutron flux distributions, and the effects of control rods on neutron fluxes. Typically offered Fall.

PHYS 24100 - Electricity And Optics

Credit Hours: 3.00. Electrostatics, current electricity, electromagnetism, magnetic properties of matter. Electromagnetic waves, geometrical and physical optics. Typically offered Summer Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- HSCI Humanities Sel - (Select from HSCI list) - Credit Hours: 3.00

16 Credits

Spring 3rd Year

HSCI 51400 - Radiation Instrumentation Laboratory

Credit Hours: 2.00. Laboratory techniques required for the application of radiation and radionuclides. Typically offered Spring.

HSCI 54000 - Radiation Biology

Credit Hours: 3.00. Effects of ionizing radiation on living systems at the molecular, cellular and tissue levels. Biological basis for radiation therapy treatment planning and radiation protection. Typically offered Spring.

PHYS 34200 - Modern Physics

Credit Hours: 3.00. A survey of basic concepts and phenomena in atomic, nuclear, and solid-state physics. Typically offered Fall.

PHYS 34000 - Modern Physics Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany PHYS 34200 or PHYS 34400. Typically offered Fall Spring.

- Humanities BSS Sel. - (Select from University list) - Credit Hours: 3.00 *
- English Selective - Credit Hours: 3.00

15 Credits

Fall 4th Year

HSCI 52600 - Principles Of Health Physics And Dosimetry

Credit Hours: 3.00. Principles of health physics, radiation dosimetry, and radiation shielding. Topics covered include natural and man-made radiation environments, operational radiation quantities and units, radiation protection philosophy, risk and dose limits, dose-response models, mortality estimates and risk calculations. Typically offered Fall.

HSCI 57400 - Medical Health Physics

Credit Hours: 2.00. This course introduces the legislation and international and national recommendations relevant to the practice

of radiation protection in medicine. Principles for the design of radiation use monitoring programs and shielding for radiation facilities is covered. Radiation risk avoidance and management for staff, patients and their families, and members of the public are discussed. Typically offered Fall.

- MA/CS Selective - (Select from list) - Credit Hours: 3.00
- Health Physics Sel - (Select from list) - Credit Hours: 3.00
- Health Physics Sel - (Select from list) - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

16 Credits

Spring 4th Year

HSCI 53400 - Applied Health Physics

Credit Hours: 3.00. Lecture and case studies related to the application of radiation dosimetry and shielding principles to the practice of health physics, including environmental and in-plant monitoring, emergency response, decommissioning and decontamination, operational criteria for meeting ALARA exposure limits, and the transport, disposal and treatment of radioactive waste. Epidemiological studies related to radiological accidents and nuclear power are also examined. Typically offered Spring.

- MA/CS Science Selective - (Select from list) - Credit Hours: 4.00
- General Science or RADH Sel. - (Select from list) - Credit Hours: 3.00
- Humanities Sel. - (Select from University list) - Credit Hours: 3.00 *

13 Credits

Note

***Satisfies a University Core Requirement.**

****A minimum grade of C must be earned in HSCI 31200, HSCI 31300, HSCI 51400, HSCI 52600, HSCI 53400, HSCI 54000, and HSCI 57400.**

Students must complete 32 credit hours of 30000 level or higher courses for graduation.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Radiological Health Sciences-Pre-Medical Physics, BS

About the Program

Radiation is all around us and is used to generate power, analyze samples and materials, diagnose medical conditions and treat cancer. These powerful tools require trained individuals (radiation safety officer/health physicist/medical physicist) to protect patients, medical staff and the public from unnecessary exposure to radiation. A radiation safety officer within an organization is responsible for the safe use of radiation and radioactive materials as well as regulatory compliance. A trained health physicist evaluates the radiation environment using instruments and calculations and works with regulatory authorities to ensure compliance with radiation exposure standards. Medical physicists work closely with physicians and patients to develop radiation therapy treatments that minimize side effects while effectively treating cancer.

Summary of Program Requirements

The Summary of Program Requirements for 2016-17 Radiological Health Sciences/Pre-Medical Physics Concentration is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

HLTH-BS
RADH-PRMP
120 credits

Major Requirements (90-91 credits)

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the

human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

- English Selective - select any 20000 level or above ENGL course - Credit Hours: 3.00

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

HSCI 31200 - Radiation Science Fundamentals

Credit Hours: 3.00. This course introduces principles and concepts related to nuclear energetics, radioactive decay, the interactions of ionizing radiation with matter, and the human health effects of exposure to ionizing radiation. Fundamental concepts related to atomic and sub-atomic physical processes as well as relevant aspects of modern physics are briefly reviewed. Students gain practical experience and enhance their understanding of radiation protection by participating in a radiological emergency response exercise (RERE). Typically offered Fall.

HSCI 31300 - Principles Of Radiation Detection And Measurement

Credit Hours: 2.00. Course presents an introduction to the principles of radiation detection and measurement, including statistical models, counting statistics, error analysis, detection limits, ionization chambers, proportional counters, GM counters, scintillation counters, gamma-ray spectroscopy, solid-state detectors, TLDs, track-etch and bubble detectors. Typically offered Fall.

HSCI 51400 - Radiation Instrumentation Laboratory

Credit Hours: 2.00. Laboratory techniques required for the application of radiation and radionuclides. Typically offered Spring.

HSCI 52600 - Principles Of Health Physics And Dosimetry

Credit Hours: 3.00. Principles of health physics, radiation dosimetry, and radiation shielding. Topics covered include natural and man-made radiation environments, operational radiation quantities and units, radiation protection philosophy, risk and dose limits, dose-response models, mortality estimates and risk calculations. Typically offered Fall.

HSCI 54000 - Radiation Biology

Credit Hours: 3.00. Effects of ionizing radiation on living systems at the molecular, cellular and tissue levels. Biological basis for radiation therapy treatment planning and radiation protection. Typically offered Spring.

HSCI 57000 - Introduction To Medical Diagnostic Imaging

Credit Hours: 3.00. This course teaches the fundamentals of medical imaging, including the basic physics and engineering associated with each imaging modality (CT, MRI, PET, and ultrasound), as well as mathematics and computational tools associated with image reconstruction and image processing. The course is intended for students in health sciences, biomedical engineering, physics, and life sciences. Typically offered Spring.

HSCI 57200 - Radiation Oncology Physics

Credit Hours: 3.00. An introductory course to the physical principles, equipment, processes, imaging guidance, and clinical techniques involved in the treatment of cancer patients with external radiation beams and radioactive sources. Various external radiation beam types and their energy deposition characteristics are described. Treatment planning dose calculation algorithms and point dose calculations are discussed. The use of international dosimetry protocols for radiation beam calibration are covered in detail. Typically offered Spring.

HSCI 57400 - Medical Health Physics

Credit Hours: 2.00. This course introduces the legislation and international and national recommendations relevant to the practice of radiation protection in medicine. Principles for the design of radiation use monitoring programs and shielding for radiation facilities is covered. Radiation risk avoidance and management for staff, patients and their families, and members of the public are discussed. Typically offered Fall.

MA 16200 - Plane Analytic Geometry And Calculus II

Credit Hours: 5.00. Continuation of MA 16100. Vectors in two and three dimensions, techniques of integration, infinite series, conic sections, polar coordinates, surfaces in three dimensions. Some schools or departments may allow only 4 credit hours toward graduation for this course. Typically offered Fall Spring Summer.

MA 16600 - Analytic Geometry And Calculus II

Credit Hours: 4.00. Continuation of MA 16500. Vectors in two and three dimensions. Techniques of integration, infinite series, polar coordinates, surfaces in three dimensions. Not open to students with credit in MA 16200. Typically offered Fall Spring.
CTL:IMA 1603 Calculus - Long II

MA 26100 - Multivariate Calculus

Credit Hours: 4.00. Planes, lines, and curves in three dimensions. Differential calculus of several variables; multiple integrals. Introduction to vector calculus. Not open to students with credit in MA 17400 or MA 27100 . Typically offered Fall Spring Summer.

MA 26200 - Linear Algebra And Differential Equations

Credit Hours: 4.00. Linear algebra, elements of differential equations. Not open to students with credit in MA 26500 or MA 26600. Typically offered Fall Spring Summer.

PHYS 17200 - Modern Mechanics

Credit Hours: 4.00. Introductory calculus-based physics course using fundamental interactions between atoms to describe Newtonian mechanics, conservation laws, energy quantization, entropy, the kinetic theory of gases, and related topics in mechanics and thermodynamics. Emphasis is on using only a few fundamental principles to describe physical phenomena extending from nuclei to galaxies. 3-D graphical simulations and numerical problem solving by computer are employed by the student from the very beginning. Typically offered Summer Fall Spring. CTL:IPS 1753 Calculus-based Physics I

PHYS 24100 - Electricity And Optics

Credit Hours: 3.00. Electrostatics, current electricity, electromagnetism, magnetic properties of matter. Electromagnetic waves, geometrical and physical optics. Typically offered Summer Fall Spring.

PHYS 25200 - Electricity And Optics Laboratory

Credit Hours: 1.00. Selected experiments in electric fields, magnetic fields, steady-state and transient d.c. circuits, thermodynamics, and optics. Typically offered Fall Spring Summer.

PHYS 34000 - Modern Physics Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany PHYS 34200 or PHYS 34400. Typically offered Fall Spring.

PHYS 34200 - Modern Physics

Credit Hours: 3.00. A survey of basic concepts and phenomena in atomic, nuclear, and solid-state physics. Typically offered Fall.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- HSCI Humanities, Behavioral/Social Sciences Selective - select from HSCI list - Credit Hours: 3.00

- Math-Computer Sciences Selective - select from list - Credit Hours: 3.00
- Physics Selective - must be PHYS 30000 or higher (PHYS 31000 Intermediate Mechanics, PHYS 36000 Quantum Mechanics, and/or PHYS 55600 Introductory Nuclear Physics are suggested) - Credit Hours: 3.00
- Physics Selective - select any 30000 or above PHYS course - Credit Hours: 3.00
- Radiological Health Sciences Selective - select from list - Credit Hours: 3.00

Note

Must earn a grade of "C" or higher in HSCI 31200, HSCI 31300, HSCI 51400, HSCI 54000, HSCI 57000, HSCI 57200, HSCI 57400; MA 16100/MA 16200 or MA 16500/MA 16600; and PHYS 17200.

Required Courses in Other Departments (24-26 credits)

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16100 - Plane Analytic Geometry And Calculus I

Credit Hours: 5.00. Introduction to differential and integral calculus of one variable, with applications. Some schools or departments may allow only 4 credit hours toward graduation for this course. Designed for students who have not had at least a one-semester calculus course in high school, with a grade of "A" or "B". Not open to students with credit in MA 16500. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring Summer.

MA 16500 - Analytic Geometry And Calculus I

Credit Hours: 4.00. Introduction to differential and integral calculus of one variable, with applications. Conic sections. Designed for students who have had at least a one-semester calculus course in high school, with a grade of "A" or "B", but are not qualified to enter MA 16200 or MA 16600, or the advanced placement courses MA 17300 or MA 27100, or the honors calculus course MA 18100. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring. CTL:IMA 1602
Calculus - Long I

- [Behavior/Social Science Core] select course from University list - Credit Hours: 3.00
- [Humanities Core] select course from University list - Credit Hours: 3.00

Electives (3-6 credits)

An Ethics course (such as PHIL 11100 - Ethics, PHIL 27000 - Biomedical Ethics, or PHIL 29000 - Environmental Ethics) is highly recommended for students pursuing the PRMP concentration.

All students must complete 32 credits of 30000 level or higher courses at Purdue for graduation.

120 credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

HSCI Humanities, Behavioral/Social Sciences Selectives List - select any 10000-59999 course(s) from the following subjects

- Anthropology (ANTH)
- Art & Design (AD)

- Classics (CLCS)
- Communication (COM)
- Dance (DANC)
- Economics (ECON)
- English (ENGL)
- Foreign Languages & Literatures (FLL)
- History (HIST)
- Interdisciplinary Studies (IDIS)
- Music (MUS)
- Philosophy (PHIL)
- Political Science (POL)
- Psychology (PSY)
- Sociology (SOC)
- Theatre (THTR)

Math-Computer Sciences Selective List

CS 15800 - C Programming

Credit Hours: 3.00. Introduction to structured programming in C. Data types and expression evaluation. Programmer-defined functions including passing parameters by value and by address. Selection topics include if/else/else-if, conditional expressions, and switch. Repetition topics include while, do-while, for, and recursion. External file input and output. Arrays, analysis of searching and sorting algorithms, and strings. Pointers and dynamic memory allocation. Students are expected to complete assignments in a collaborative environment. CS 15800 may be used to satisfy College of Science requirement of participation in at least one team-building and collaboration experience. Typically offered Summer Fall Spring.

CS 15900 - Programming Applications For Engineers

Credit Hours: 3.00. Fundamental principles, concepts, and methods of programming (C and MATLAB), with emphasis on applications in the physical sciences and engineering. Basic problem solving and programming techniques; fundamental algorithms and data structures; and use of programming logic in solving engineering problems. Students are expected to complete assignments in a collaborative learning environment. Typically offered Summer Fall Spring.

CS 18000 - Problem Solving And Object-Oriented Programming

Credit Hours: 4.00. Problem solving and algorithms, implementation of algorithms in a high level programming language, conditionals, the iterative approach and debugging, collections of data, searching and sorting, solving problems by decomposition, the object-oriented approach, subclasses of existing classes, handling exceptions that occur when the program is running, graphical user interfaces (GUIs), data stored in files, abstract data types, a glimpse at topics from other CS courses. Intended primarily for students majoring in computer sciences. Credit cannot be obtained for both CS 18000 and any of 15600, CS 15800 and CS 15900. Not open to students with credit in CS 18100 or CS 24000. Typically offered Fall Spring.

CS 31400 - Numerical Methods

Credit Hours: 3.00. Iterative methods for solving nonlinear equations; direct and iterative methods for solving linear systems; approximations of functions, derivatives, and integrals; error analysis. Typically offered Spring.

CS 47800 - Introduction to Bioinformatics

Credit Hours: 3.00. (BIOL 47800) Bioinformatics is broadly defined as the study of molecular biological information, targeting particularly the enormous volume of DNA sequence and functional complexity embedded in entire genomes. Topics will include understanding the evolutionary organization of genes (genomics), the structure and function of gene products (proteomics), and the dynamics of gene expression in biological processes (transcriptomics). Inherently, bioinformatics is interdisciplinary, melding various applications of computational science with biology. This jointly taught course introduces analytical methods from biology, statistics and computer science that are necessary for bioinformatics investigations. The course is intended for junior and senior undergraduates from various science backgrounds. Our objective is to develop the skills of both tool users and tool designers in this important new field of research. Typically offered Fall.

MA 26200 - Linear Algebra And Differential Equations

Credit Hours: 4.00. Linear algebra, elements of differential equations. Not open to students with credit in MA 26500 or MA 26600. Typically offered Fall Spring Summer.

MA 41600 - Probability

Credit Hours: 3.00. (STAT 41600) An introduction to mathematical probability suitable as a preparation for actuarial science, statistical theory, and mathematical modeling. General probability rules, conditional probability and Bayes theorem, discrete and continuous random variables, moments and moment generating functions, joint and conditional distributions, standard discrete and continuous distributions and their properties, law of large numbers and central limit theorem. Typically offered Fall Spring.

MA 52700 - Advanced Mathematics For Engineers And Physicists I

Credit Hours: 3.00. MA 52700 is not a prerequisite for MA 52800; these courses can be taken independently. Topics in MA 52700 include linear algebra, systems of ordinary differential equations, Laplace transforms, Fourier series and transforms, and partial differential equations. MA 51100 is recommended. Typically offered Fall.

MA 52800 - Advanced Mathematics For Engineers And Physicists II

Credit Hours: 3.00. MA 52700 is not a prerequisite for MA 52800; these courses can be taken independently. Topics in MA 52800 include divergence theorem, Stokes theorem, complex variables, contour integration, calculus of residues and applications, conformal mapping, and potential theory. MA 51000 is recommended. Typically offered Spring.

PHYS 58000 - Computational Physics

Credit Hours: 3.00. Introduction to computationally based problem solving in physics, emphasis on understanding and applying various numerical algorithms to different types of physics problems. Topics will include chaos in mechanical systems, stochastic systems including percolation and fractal structures, molecular dynamics and the properties of simple fluids, Monte Carlo methods and phase transitions, and time dependent as well as time dependent problems in quantum mechanics. Typically offered Fall.

STAT 31100 - Introductory Probability

Credit Hours: 3.00. Formulation of probability problems, discrete and continuous random variables, expectation, standard distributions, applications to statistical problems, and problems in the physical sciences. Credit cannot be given for more than one of STAT 22500, 31100, or STAT 41600. Prerequisite: two semesters of college calculus. Typically offered Spring.

STAT 51200 - Applied Regression Analysis

Credit Hours: 3.00. Inference in simple and multiple linear regression, residual analysis, transformations, polynomial regression, model building with real data, nonlinear regression. One-way and two-way analysis of variance, multiple comparisons, fixed and random factors, analysis of covariance. Use of existing statistical computer programs. Prerequisite: Coursework in Statistical Methods with a calculus prerequisite. Typically offered Fall Spring Summer.

Radiological Health Sciences Selective List for PRMP

AT 57200 - Human Error And Safety

Credit Hours: 3.00. Explores the definition and nature of human error, error chains, and causal factors in error generation. Error taxonomies are reviewed in order to provide a classification scheme for grouping errors and assessing error criticality. Methods for assessing risk and predicting error generation potentials are learned, as well as strategies for controlling or eliminating errors. Case studies are utilized throughout the course to illustrate course concepts. Permission of instructor required. Typically offered Fall Spring.

BIOL 41500 - Introduction To Molecular Biology

Credit Hours: 3.00. An introduction to modern molecular biology techniques and how they are used to address current topics in gene regulation. Emphasis will be placed on experimental procedures and model systems, such as site-directed mutagenesis of isolated genes and their subsequent introduction into prokaryotic and eukaryotic cells. Topics will address the molecular control mechanisms associated with DNA replication, RNA transcription, RNA processing, and differential gene expression. Typically offered Fall.

BIOL 44400 - Human Genetics

Credit Hours: 3.00. An intermediate-level survey course of human genetics with a balanced review of both Mendelian and molecular aspects. Review of current development and application of DNA technology emphasized. Typically offered Fall.

BIOL 54200 - Modular Upper-Division Laboratory Course

Credit Hours: 1.00 or 2.00. This is a project-oriented course designed to give the student exposure to laboratory research through a series of 5-week modules. The student must complete the introductory 5-week module or have the consent of the instructor before taking the other modules. Topics may include animal cell culture, cloning and blot analysis, DNA fingerprinting, analysis of nucleic acid sequences, animal physiology, bacterial genetics, advanced neurophysiology, chromatin structure, eukaryotic gene expression, genomics, yeast molecular biology, and molecular virology, etc. Typically offered Fall Spring.

BIOL 51600 - Molecular Biology Of Cancer

Credit Hours: 3.00. A detailed course examining the molecular mechanisms controlling the growth of animal cells. Emphasis will be placed on current experimental approaches to defining the molecular basis of growth regulation in developing systems and the uncontrolled proliferation of cells in metabolic disorders, such as cancer. Typically offered Spring.

CHM 22400 - Introductory Quantitative Analysis

Credit Hours: 4.00. Introduction to titrimetric, gravimetric, and instrumental methods of analysis; principles of separation processes, including chromatography; recognition and evaluation of possible sources of error. Required of students majoring in biology who do not take CHM 32100. Typically offered Spring.

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

HK 44500 - Principles Of Epidemiology

Credit Hours: 3.00. The study of the distribution of diseases in human populations and factors that influence these distributions. Typically offered Fall Spring.

HSCI 34500 - Introduction To Occupational And Environmental Health Sciences

Credit Hours: 3.00. Principles of occupational health (industrial hygiene) and environmental health as related to anticipation, recognition, evaluation, and control of hazards in the workplace and the surrounding community. Emphasis is on hazards of chemicals and their role in occupationally and environmentally related diseases. Historical basis and current legislation are discussed. In addition, the principles of epidemiology, toxicology, exposure standards, and respiratory protection are addressed. Typically offered Fall.

HSCI 54700 - Fundamentals Of Epidemiology

Credit Hours: 3.00. This course is an introduction to epidemiology, which is the study of the patterns, causes, and impact of disease in populations. Epidemiology is increasingly important for public health and clinical medicine research and policy. This course will discuss the basic principles and methods of epidemiology, including measurements of disease occurrence and association, study designs, and determination of causality. Contemporary examples will be used to illustrate the application of these concepts, with an emphasis on environmental causes of disease. Typically offered Fall.

HSCI 55100 - Physical Agents In Environmental Health

Credit Hours: 3.00. Physical characterization and biological interactions of nonionizing radiation with emphasis on the adverse effects of human exposure. Topics include source characterization, environmental exposure assessment, measurement instrumentation, toxicological and epidemiological findings, control strategies. Typically offered Spring.

HSCI 55200 - Introduction To Aerosol Science

Credit Hours: 3.00. The principles of aerosol behavior and sampling, with particular emphasis on applications in the health sciences. Topics include aerosol aerodynamics, aerosol filtration, pulmonary deposition of aerosols, methods of environmental sampling, and generation of laboratory aerosols. Typically offered Fall Spring.

HSCI 56000 - Toxicology

Credit Hours: 3.00. (MCMP 56000) Introduction to general principles of toxicology, target organ toxicity, and safety evaluation. Covers toxicity of metals, solvents, pesticides, gases, dusts, and food additives. Typically offered Fall.

HSCI 58000 - Occupational Safety And Ergonomics

Credit Hours: 3.00. Occupational safety is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work. Occupational ergonomics is a branch of science that focuses on optimizing the relationships between workers and their work environment. This course focuses on the principles and applications of safety and ergonomics as it applies to workers. The first part of the course will consist of lectures on the fundamentals of safety standards and liability and the development of work-related musculoskeletal disorders, ergonomic risk factors including work practices, tools and workstation design. The last part will consist of identification and use of safety and ergonomic controls to reduce and prevent work-related fatalities, injuries, and musculoskeletal disorders. Typically offered Fall.

PHIL 27000 - Biomedical Ethics

Credit Hours: 3.00. An examination of the moral problems raised by developments in medicine and the biomedical sciences. Topics include abortion, reproductive technologies, euthanasia and physician-assisted suicide, experiments involving human subjects, and health care delivery. Typically offered Fall Spring.

PHIL 29000 - Environmental Ethics

Credit Hours: 3.00. An introduction to philosophical issues surrounding debates about the environment and our treatment of it. Topics may include endangered species, "deep ecology," the scope and limits of cost-benefit analyses, and duties to future generations. Typically offered Fall Spring.

PHIL 35000 - Philosophy And Probability

Credit Hours: 3.00. This course introduces the student to mathematical probability and its philosophical applications. Topics may include theories of probability, Hume's problem of induction, Goodman's paradox, and the foundations of scientific reasoning. Typically offered Spring Fall.

PHYS 22000 - General Physics

Credit Hours: 4.00. Mechanics, heat, and sound, for students not specializing in physics. Typically offered Fall Spring Summer.
CTL:IPS 1751 Algebra-based Physics I

PHYS 22100 - General Physics

Credit Hours: 4.00. Electricity, light, and modern physics, for students not specializing in physics. Typically offered Fall Spring Summer. CTL:IPS 1752 Algebra-based Physics II

PHYS 31000 - Intermediate Mechanics

Credit Hours: 4.00. For students familiar with calculus. Elements of vector algebra; statics of particles and rigid bodies; theory of couples; principle of virtual work; kinematics; dynamics of particles and rigid bodies; work, power, and energy. Typically offered Fall.

PHYS 36000 - Quantum Mechanics

Credit Hours: 3.00. Historical development of quantum mechanics, wave packets, uncertainty principle, Schrodinger equation, operators, the hydrogen atom, electron spin, angular momentum, perturbation theory, and other selected topics. Typically offered Spring.

PHYS 55000 - Introduction To Quantum Mechanics

Credit Hours: 3.00. Brief historical survey of the development of quantum mechanics; wave-packets, uncertainty principle, wave functions, operators, Schrodinger equation with application to one-dimensional problems, the hydrogen atom, electron spin, selected topics in perturbation theory, scattering theory, and compounding of angular momenta. Not available for students with credit in PHYS 36000 or PHYS 46000. Typically offered Fall.

PHYS 55600 - Introductory Nuclear Physics

Credit Hours: 3.00. Theory of relativity, brief survey of systematics of nuclei and elementary particles, structure of stable nuclei, radioactivity, interaction of nuclear radiation with matter, nuclear reactions, particle accelerators, nuclear instruments, fission, nuclear reactors. Typically offered Spring.

PHYS 56400 - Introduction To Elements Particle Physics

Credit Hours: 3.00. This course brings students up to the current status of research in elementary particle physics. The focus of the course is the construction of the Standard Model with emphasis on the electroweak theory. The seminal experiments that confirmed the predictions of the Standard Model is presented. The solar neutrino problem, the search for nonzero neutrino masses, and the efforts to construct a theory which unifies all interactions, including gravity, is discussed. Typically offered Spring.

PHYS 56500 - Introduction To Elementary Particle Physics II

Credit Hours: 3.00. This course follows PHYS 56400, and it continues to present current topics in elementary particle physics. It focuses on the Higgs mechanism, and it explores physics beyond the standard model. Special attention is devoted to supersymmetry and searches for new particles. Typically offered Spring.

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

HSCI 10100 - Introduction to the Health Sciences Professions

Credit Hours: 2.00. This course will present an overview of the fields in both the preventive, Public Health, as well as the clinical, Private Health, sides of the Allied Health Science Professions as it presents the holistic nature of health maintenance. Students will have the opportunity to hear from health professionals practicing in the allied health and preprofessional concentrations as well as from School of Health Sciences faculty in their areas of expertise in the fields of industrial hygiene, ergonomics, radiological sciences, toxicology and environmental health science. Typically offered Fall.

MA 16500 - Analytic Geometry And Calculus I

Credit Hours: 4.00. Introduction to differential and integral calculus of one variable, with applications. Conic sections. Designed for students who have had at least a one-semester calculus course in high school, with a grade of "A" or "B", but are not qualified to enter MA 16200 or MA 16600, or the advanced placement courses MA 17300 or MA 27100, or the honors calculus course MA 18100. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring. CTL:IMA 1602
Calculus - Long I

MA 16100 - Plane Analytic Geometry And Calculus I

Credit Hours: 5.00. Introduction to differential and integral calculus of one variable, with applications. Some schools or departments may allow only 4 credit hours toward graduation for this course. Designed for students who have not had at least a one-semester calculus course in high school, with a grade of "A" or "B". Not open to students with credit in MA 16500. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring Summer.

17-18 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16600 - Analytic Geometry And Calculus II

Credit Hours: 4.00. Continuation of MA 16500. Vectors in two and three dimensions. Techniques of integration, infinite series, polar coordinates, surfaces in three dimensions. Not open to students with credit in MA 16200. Typically offered Fall Spring. CTL:IMA 1603 Calculus - Long II

MA 16200 - Plane Analytic Geometry And Calculus II

Credit Hours: 5.00. Continuation of MA 16100. Vectors in two and three dimensions, techniques of integration, infinite series, conic sections, polar coordinates, surfaces in three dimensions. Some schools or departments may allow only 4 credit hours toward graduation for this course. Typically offered Fall Spring Summer.

15-17 Credits

Fall 2nd Year

HSCI 20200 - Essentials Of Environmental, Occupational, And Radiological Health Sciences

Credit Hours: 3.00. This course is designed to introduce the essential concepts of Environmental, Occupational, and Radiological Health Science. The principles of these three fields including the environmental impacts on human health and disease, environmental toxicology, occupational health concerns, contemporary occupational health issues, radioactivity, and the human health effects of exposure to ionizing radiation will be discussed. Typically offered Fall.

MA 26100 - Multivariate Calculus

Credit Hours: 4.00. Planes, lines, and curves in three dimensions. Differential calculus of several variables; multiple integrals.

Introduction to vector calculus. Not open to students with credit in MA 17400 or MA 27100 . Typically offered Fall Spring Summer.

PHYS 17200 - Modern Mechanics

Credit Hours: 4.00. Introductory calculus-based physics course using fundamental interactions between atoms to describe Newtonian mechanics, conservation laws, energy quantization, entropy, the kinetic theory of gases, and related topics in mechanics and thermodynamics. Emphasis is on using only a few fundamental principles to describe physical phenomena extending from nuclei to galaxies. 3-D graphical simulations and numerical problem solving by computer are employed by the student from the very beginning. Typically offered Summer Fall Spring. CTL:IPS 1753 Calculus-based Physics I

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

14 Credits

Spring 2nd Year

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

MA 26200 - Linear Algebra And Differential Equations

Credit Hours: 4.00. Linear algebra, elements of differential equations. Not open to students with credit in MA 26500 or MA 26600. Typically offered Fall Spring Summer.

PHYS 24100 - Electricity And Optics

Credit Hours: 3.00. Electrostatics, current electricity, electromagnetism, magnetic properties of matter. Electromagnetic waves, geometrical and physical optics. Typically offered Summer Fall Spring.

PHYS 25200 - Electricity And Optics Laboratory

Credit Hours: 1.00. Selected experiments in electric fields, magnetic fields, steady-state and transient d.c. circuits, thermodynamics, and optics. Typically offered Fall Spring Summer.

- HSCI Humanities Sel. - (Select from HSCI list) - Credit Hours: 3.00

14 Credits

Fall 3rd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

HSCI 31200 - Radiation Science Fundamentals

Credit Hours: 3.00. This course introduces principles and concepts related to nuclear energetics, radioactive decay, the interactions of ionizing radiation with matter, and the human health effects of exposure to ionizing radiation. Fundamental concepts related to atomic and sub-atomic physical processes as well as relevant aspects of modern physics are briefly reviewed. Students gain practical experience and enhance their understanding of radiation protection by participating in a radiological emergency response exercise (RERE). Typically offered Fall.

HSCI 31300 - Principles Of Radiation Detection And Measurement

Credit Hours: 2.00. Course presents an introduction to the principles of radiation detection and measurement, including statistical models, counting statistics, error analysis, detection limits, ionization chambers, proportional counters, GM counters, scintillation counters, gamma-ray spectroscopy, solid-state detectors, TLDs, track-etch and bubble detectors. Typically offered Fall.

PHYS 34200 - Modern Physics

Credit Hours: 3.00. A survey of basic concepts and phenomena in atomic, nuclear, and solid-state physics. Typically offered Fall.

PHYS 34000 - Modern Physics Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany PHYS 34200 or PHYS 34400. Typically offered Fall Spring.

- English Selective - Select any 20000 or above ENGL course - Credit Hours: 3.00

16 Credits

Spring 3rd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

HSCI 51400 - Radiation Instrumentation Laboratory

Credit Hours: 2.00. Laboratory techniques required for the application of radiation and radionuclides. Typically offered Spring.

HSCI 54000 - Radiation Biology

Credit Hours: 3.00. Effects of ionizing radiation on living systems at the molecular, cellular and tissue levels. Biological basis for radiation therapy treatment planning and radiation protection. Typically offered Spring.

- MA/CS Science Selective - (Select from list) - Credit Hours: 3.00
- Humanities BSS Sel. - (Select from University list) - Credit Hours: 3.00 *

15 Credits

Fall 4th Year

HSCI 52600 - Principles Of Health Physics And Dosimetry

Credit Hours: 3.00. Principles of health physics, radiation dosimetry, and radiation shielding. Topics covered include natural and

man-made radiation environments, operational radiation quantities and units, radiation protection philosophy, risk and dose limits, dose-response models, mortality estimates and risk calculations. Typically offered Fall.

HSCI 57400 - Medical Health Physics

Credit Hours: 2.00. This course introduces the legislation and international and national recommendations relevant to the practice of radiation protection in medicine. Principles for the design of radiation use monitoring programs and shielding for radiation facilities is covered. Radiation risk avoidance and management for staff, patients and their families, and members of the public are discussed. Typically offered Fall.

- Physics Selective - Credit Hours: 3.00
- Humanities Sel. - (Select from University list) - Credit Hours: 3.00 *
- RADH HSCI Sel. - Select from list - Credit Hours: 3.00

14 Credits

Spring 4th Year

HSCI 57000 - Introduction To Medical Diagnostic Imaging

Credit Hours: 3.00. This course teaches the fundamentals of medical imaging, including the basic physics and engineering associated with each imaging modality (CT, MRI, PET, and ultrasound), as well as mathematics and computational tools associated with image reconstruction and image processing. The course is intended for students in health sciences, biomedical engineering, physics, and life sciences. Typically offered Spring.

HSCI 57200 - Radiation Oncology Physics

Credit Hours: 3.00. An introductory course to the physical principles, equipment, processes, imaging guidance, and clinical techniques involved in the treatment of cancer patients with external radiation beams and radioactive sources. Various external radiation beam types and their energy deposition characteristics are described. Treatment planning dose calculation algorithms and point dose calculations are discussed. The use of international dosimetry protocols for radiation beam calibration are covered in detail. Typically offered Spring.

- PHYS Selective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 0.00 - 3.00

12-15 Credits

Notes

*Satisfies a University Core Requirement.

**A minimum grade of C must be earned.

Students must complete 32 credit hours of 30000 level or higher courses for graduation.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Radiological Health Sciences Minor

Code: RADH

The following courses describe the minimum coursework necessary to earn a minor in RHS. In addition, GPA over all HSCI courses must be 2.0 or higher. An RHS minor requires a total of 15 or more HSCI credit hours, and all prerequisites for these courses.

Part I (5 credits) Fundamental Required Courses

HSCI 31200 - Radiation Science Fundamentals

Credit Hours: 3.00. This course introduces principles and concepts related to nuclear energetics, radioactive decay, the interactions of ionizing radiation with matter, and the human health effects of exposure to ionizing radiation. Fundamental concepts related to atomic and sub-atomic physical processes as well as relevant aspects of modern physics are briefly reviewed. Students gain practical experience and enhance their understanding of radiation protection by participating in a radiological emergency response exercise (RERE). Typically offered Fall.

HSCI 31300 - Principles Of Radiation Detection And Measurement

Credit Hours: 2.00. Course presents an introduction to the principles of radiation detection and measurement, including statistical models, counting statistics, error analysis, detection limits, ionization chambers, proportional counters, GM counters, scintillation counters, gamma-ray spectroscopy, solid-state detectors, TLDs, track-etch and bubble detectors. Typically offered Fall.

Part II (8 credits) Advanced Required Courses

HSCI 51400 - Radiation Instrumentation Laboratory

Credit Hours: 2.00. Laboratory techniques required for the application of radiation and radionuclides. Typically offered Spring.

HSCI 52600 - Principles Of Health Physics And Dosimetry

Credit Hours: 3.00. Principles of health physics, radiation dosimetry, and radiation shielding. Topics covered include natural and man-made radiation environments, operational radiation quantities and units, radiation protection philosophy, risk and dose limits, dose-response models, mortality estimates and risk calculations. Typically offered Fall.

HSCI 54000 - Radiation Biology

Credit Hours: 3.00. Effects of ionizing radiation on living systems at the molecular, cellular and tissue levels. Biological basis for radiation therapy treatment planning and radiation protection. Typically offered Spring.

Part III (select at least 2 credits) Selectives

HSCI 53400 - Applied Health Physics

Credit Hours: 3.00. Lecture and case studies related to the application of radiation dosimetry and shielding principles to the practice of health physics, including environmental and in-plant monitoring, emergency response, decommissioning and decontamination, operational criteria for meeting ALARA exposure limits, and the transport, disposal and treatment of radioactive waste. Epidemiological studies related to radiological accidents and nuclear power are also examined. Typically offered Spring.

HSCI 57000 - Introduction To Medical Diagnostic Imaging

Credit Hours: 3.00. This course teaches the fundamentals of medical imaging, including the basic physics and engineering associated with each imaging modality (CT, MRI, PET, and ultrasound), as well as mathematics and computational tools associated with image reconstruction and image processing. The course is intended for students in health sciences, biomedical engineering, physics, and life sciences. Typically offered Spring.

HSCI 57200 - Radiation Oncology Physics

Credit Hours: 3.00. An introductory course to the physical principles, equipment, processes, imaging guidance, and clinical techniques involved in the treatment of cancer patients with external radiation beams and radioactive sources. Various external radiation beam types and their energy deposition characteristics are described. Treatment planning dose calculation algorithms and point dose calculations are discussed. The use of international dosimetry protocols for radiation beam calibration are covered in detail. Typically offered Spring.

HSCI 57400 - Medical Health Physics

Credit Hours: 2.00. This course introduces the legislation and international and national recommendations relevant to the practice of radiation protection in medicine. Principles for the design of radiation use monitoring programs and shielding for radiation facilities is covered. Radiation risk avoidance and management for staff, patients and their families, and members of the public are discussed. Typically offered Fall.

School of Hospitality and Tourism Management

About Hospitality and Tourism Management

In Hospitality and Tourism Management (HTM) students gain experience and knowledge in food production and service skills in the Boiler Bistro and John Purdue Room, and from internships (in the United States and abroad) at convention and visitor bureaus, resorts, sports facilities, restaurants, and hotels. Students develop critical thinking ability and a broad perspective in human resource management, hospitality law, accounting, finance, marketing, information systems, international relations, senior living, and transportation. Students can choose concentrations in the following areas: Environment Sustainability, Human Resources, Layout and Design, Marketing/Sales.

Faculty

<http://www.purdue.edu/hhs/htm/directory/faculty/index.html>

Contact Information

Hospitality & Tourism Management
Purdue University
Marriott Hall, Room 128A
900 W. State Street
West Lafayette, IN 47907
Phone: (765) 494-8724

Graduate Information

For Graduate Information please see Hospitality and Tourism Management Graduate Program Information.

Hospitality and Tourism Management, BS

About the Program

In Hospitality and Tourism Management (HTM) students gain experience and knowledge in food production and service skills in the Boiler Bistro and John Purdue Room, and from internships (in the United States and abroad) at convention and visitor bureaus, resorts, sports facilities, restaurants, and hotels. Students develop critical thinking ability and a broad perspective in human resource management, hospitality law, accounting, finance, marketing, information systems, international relations, senior living, and transportation. Students can choose concentrations in the following areas: Environment Sustainability, Human Resources, Layout and Design, Marketing/Sales.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Hospitality and Tourism Management include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HSTM-BS
HTMT
120 credits

Major Requirements (57-58 credits)

Students must earn a "C-" or better in all HTM courses

HTM 10010 - Introduction To The Hospitality And Tourism Industry

Credit Hours: 1.00. An overview of the basic dimensions of professionalism, customer service, sustainability, civic engagement, ethics, and the historical perspective that is integral to the hospitality and tourism industry. Students will also keep pace with current industry trends through guest lectures from executives of companies from foodservice, lodging, and tourism. Typically offered Fall.

HTM 14100 - Financial Accounting For The Service Industries

Credit Hours: 3.00. Fundamental accounting principles and procedures applied to the hospitality and service industries. Includes study of the uniform system of accounts, financial statements, special purpose journals, and subsidiary ledgers unique to the hospitality and service industries. Typically offered Summer Fall Spring.

HTM 17300 - Introduction To Tourism Management

Credit Hours: 3.00. This is an introduction to tourism management using a system approach that integrates a variety of hospitality and travel organizations and businesses. It focuses on the understanding of tourism from the perspectives of travelers and destinations, while identifying tourism's economic, socio-cultural, and environmental impacts on communities. Typically offered Fall Spring.

HTM 18100 - Lodging Management

Credit Hours: 3.00. Organization, management and operating procedures of lodging facilities. Guest-employee interactions will be analyzed along with current trends and cutting edge topics in the lodging industry. A history of the lodging industry will be discussed. Typically offered Fall Spring.

HTM 19100 - Sanitation And Health In Foodservice, Lodging, And Tourism

Credit Hours: 3.00. This course introduces students to the foodservice component of the Hospitality and Tourism industry and explores food safety and other health related issues. Application of sanitation principles in restaurants, hospitals, schools, hotels, cruise ships, airlines, and international travel are covered. Students must pass a National Sanitation Certification Examination to receive credit. Typically offered Fall Spring.

HTM 20200 - Hospitality And Tourism Work Experience

Credit Hours: 1.00. This course is a supervised paid industry work experience in the hospitality and tourism industry. Students are required to present a signed agreement from their employer prior to initiating employment. Students are also required to prepare a series of work and reflective reports. A minimum of 320 work hours is required for completion during either a summer or semester period. Typically offered Summer.

HTM 21200 - Organization And Management In The Hospitality And Tourism Industry

Credit Hours: 3.00. Basic principles of planning, organizing, directing, and controlling human and physical resources will be addressed. Students will also learn how these principles can be applied to maximize the organizational effectiveness of hospitality and tourism businesses. Typically offered Fall Spring.

HTM 23100 - Hospitality And Tourism Marketing

Credit Hours: 3.00. This course teaches students a customer-oriented approach to marketing in hospitality and tourism. The role of marketing in an organization's overall strategic plan is emphasized. Techniques available to hotels, restaurants, and other tourism businesses are described and evaluated, including packaging, the travel trade, advertising, sales promotion, positioning and branding. Typically offered Fall Spring.

HTM 24100 - Managerial Accounting And Financial Management In Hospitality Operations

Credit Hours: 3.00. Managerial and financial analyses of numerical data used for decision-making. Consideration of systems, techniques, information types, and presentational forms used by hospitality management. Emphasis on situations oriented to the hospitality industry. Typically offered Summer Fall Spring.

HTM 29101 - Quantity Food Production And Service Laboratory

Credit Hours: 2.00. Basic knowledge of foodservice operations. Students learn and develop food production and service skills in the Boiler Bristo and the John Purdue Room. Students are exposed to quantity cooking methods, the use and care of equipment, and service techniques as they rotate through various positions commonly found in foodservice operations. All aspects of the dining experience are experienced by students. National Sanitation Certification needed. Typically offered Fall Spring.

HTM 29102 - Introduction To Foodservice Management

Credit Hours: 2.00. An introduction to food preparation methods and service techniques in quantity food settings. Students become familiar with ingredients and culinary terminology, and learn to read, write and evaluate menus. Recipe conversion, inventory and costing skills are developed. Production methods and product flow are examined. Front-of-the-house service techniques as well as front-and-back-of-the-house interactions will be studied. Typically offered Fall Spring.

HTM 30200 - Hospitality And Tourism Industry Internship

Credit Hours: 1.00 to 2.00. This course is a supervised and structured industry internship experience. Students are required to obtain a signed internship learning agreement with an employer prior to starting the internship. The internship consists of rotations through at least 3 functional areas. Students are also required to prepare comprehensive written management reports reflecting upon their internship experience and present employer evaluation. Variable credits with a minimum of 320 work hours needed for each credit hour or 640 for two credit hours. Typically offered Summer.

HTM 31200 - Human Resources Management For The Service Industries

Credit Hours: 3.00. The principles and practices of managing human resources for effective operations of hospitality and tourism businesses will be covered including: analysis and design of work, recruiting, selection, training and development, performance management, compensation, employee relations, and strategies for supporting organizational strategies. Typically offered Fall Spring.

HTM 32200 - Hospitality Facilities Management

Credit Hours: 3.00. Technical and managerial issues relating to the operation and maintenance of the physical plant and equipment in hospitality industry facilities. Typically offered Fall Spring.

HTM 34100 - Cost Controls In Foodservice And Lodging

Credit Hours: 3.00. Application of cost controls; development of cost-reduction methods through management policy and decisions; examination of cost-control techniques for food, labor, and supplies in addition to the emphasis on beverage management control. Typically offered Fall Spring.

HTM 38110 - Revenue Management In The Lodging Industry

Credit Hours: 3.00. This course will add to and build upon the knowledge acquired in HTM 18100 - Lodging Management. The class will provide a theoretical perspective on service management and how service management concepts can be applied to the hospitality business. The course will also provide an understanding of revenue management's key concepts and applicability of revenue maximization strategies and their operational aspects, components of effective revenue management will be analyzed and its effects on overall profitability. The course will also review the latest issues and trends affecting all aspects and segments of the lodging industry. Typically offered Fall Spring.

HTM 41100 - Hospitality And Tourism Law

Credit Hours: 3.00. Overview of the fundamental legal framework that governs the conduct of hospitality and tourism managers. Topics include civil rights, contracts, court procedures, ethics, and risk management. Typically offered Fall Spring.

HTM 49111 - Beverage Operation Management

Credit Hours: 1.00. This course teaches students the historical background and modern day principles and management practices regarding the production, selection, purchasing, storage and service of beverage alcohol in all aspects of the hospitality industry. Certification in State of Indiana Responsible Service of Alcohol program is required to earn course credit. Students must be at least 21 years of age. Permission of department required. Typically offered Fall Spring.

HTM 49200 - Advanced Foodservice Management

Credit Hours: 4.00. Utilize managerial skills and techniques with planning, organizing, directing and controlling a full service restaurant operation. Management teams of two to three students develop, market, and operate a restaurant that is open to the public. Emphasis is placed on utilizing effective management skills to create a high quality, profitable operation with well planned systems and highly motivated, organized employees. Typically offered Fall Spring.

HTM 49900 - Feasibility Studies And Business Development In Hospitality And Tourism

Credit Hours: 3.00. The study of business development. The course will cover all stages in the feasibility and development process. Emphasis will be on strategic planning, design of systems, models and problem analysis, leading to the opening of a successful hospitality or tourism business. Typically offered Fall Spring.

- HTM Select Courses - select from HTM Select Course List - Credit Hours: 3.00
- HTM Select Courses - select from HTM Select Course List - Credit Hours: 3.00

Required Courses in Other Departments (36-38 credits)

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

CS 23500 - Introduction To Organizational Computing

Credit Hours: 3.00. People and organizations, decision-making, information systems, telecommunications, desktop systems, integration tools, collaboration and groupware, multimedia, authoring multimedia documents, emerging technologies. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

ECON 25200 - Macroeconomics

Credit Hours: 3.00. Introduction to macroeconomic theory. The course develops a theoretical framework permitting an analysis of the forces affecting national income, employment, interest rates, and the rate of inflation. Emphasis is placed upon the role of government fiscal and monetary policy in promoting economic growth and stable prices. Typically offered Fall Spring Summer. CTL:ISH 1041 Macroeconomics

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 15300 - Algebra And Trigonometry I

Credit Hours: 3.00. Exponents and radicals; algebraic and fractional expressions. Equations and inequalities, systems of linear equations. Polynomial, exponential, and logarithmic functions. Not open to students with credit in MA 15900. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring Summer. CTL:IMA 1601 College Algebra

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

NUTR 20200 - Principles Of Food Preparation And Nutrition

Credit Hours: 4.00. Chemical, physical, microbiological, and nutritional principles of food preparation. Functions and sources of

nutrients, their relationship to a healthy lifestyle and incorporating the benefits into marketing of foodservice. Typically offered Fall Spring.

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

ANTH 10000 - Introduction To Anthropology

Credit Hours: 3.00. A general introduction to anthropology's holistic approach to human nature and behavior. A basic survey of biocultural developmental and evolutionary processes, and human uniformity and diversity through time and across space. Typically offered Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- [Science Core] - select from University list - Credit Hours: 3.00
- [Humanities Core] - select from University list - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list - Credit Hours: 3.00

Electives (24-27 credits)

120 semester credits required for Bachelor of Science degree

At least 32 credits of coursework required at 30000 level or higher to meet graduation requirements

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

HTM 10010 - Introduction To The Hospitality And Tourism Industry

Credit Hours: 1.00. An overview of the basic dimensions of professionalism, customer service, sustainability, civic engagement, ethics, and the historical perspective that is integral to the hospitality and tourism industry. Students will also keep pace with current industry trends through guest lectures from executives of companies from foodservice, lodging, and tourism. Typically offered Fall.

HTM 17300 - Introduction To Tourism Management

Credit Hours: 3.00. This is an introduction to tourism management using a system approach that integrates a variety of hospitality and travel organizations and businesses. It focuses on the understanding of tourism from the perspectives of travelers and destinations, while identifying tourism's economic, socio-cultural, and environmental impacts on communities. Typically offered Fall Spring.

- Elective - Credit Hours: 3.00

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 15300 - Algebra And Trigonometry I

Credit Hours: 3.00. Exponents and radicals; algebraic and fractional expressions. Equations and inequalities, systems of linear equations. Polynomial, exponential, and logarithmic functions. Not open to students with credit in MA 15900. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring Summer. CTL:IMA 1601 College Algebra

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

- Humanities - Credit Hours: 3.00 *
- Elective - Credit Hours: 1.00

14-15 Credits

Spring 1st Year

HTM 19100 - Sanitation And Health In Foodservice, Lodging, And Tourism

Credit Hours: 3.00. This course introduces students to the foodservice component of the Hospitality and Tourism industry and explores food safety and other health related issues. Application of sanitation principles in restaurants, hospitals, schools, hotels, cruise ships, airlines, and international travel are covered. Students must pass a National Sanitation Certification Examination to receive credit. Typically offered Fall Spring.

HTM 18100 - Lodging Management

Credit Hours: 3.00. Organization, management and operating procedures of lodging facilities. Guest-employee interactions will be analyzed along with current trends and cutting edge topics in the lodging industry. A history of the lodging industry will be discussed. Typically offered Fall Spring.

HTM 14100 - Financial Accounting For The Service Industries

Credit Hours: 3.00. Fundamental accounting principles and procedures applied to the hospitality and service industries. Includes study of the uniform system of accounts, financial statements, special purpose journals, and subsidiary ledgers unique to the hospitality and service industries. Typically offered Summer Fall Spring.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

ECON 25200 - Macroeconomics

Credit Hours: 3.00. Introduction to macroeconomic theory. The course develops a theoretical framework permitting an analysis of the forces affecting national income, employment, interest rates, and the rate of inflation. Emphasis is placed upon the role of government fiscal and monetary policy in promoting economic growth and stable prices. Typically offered Fall Spring Summer. CTL:ISH 1041 Macroeconomics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

ANTH 10000 - Introduction To Anthropology

Credit Hours: 3.00. A general introduction to anthropology's holistic approach to human nature and behavior. A basic survey of biocultural developmental and evolutionary processes, and human uniformity and diversity through time and across space. Typically offered Summer.

- Elective - Credit Hours: 3.00 or

HTM 17300 - Introduction To Tourism Management

Credit Hours: 3.00. This is an introduction to tourism management using a system approach that integrates a variety of hospitality and travel organizations and businesses. It focuses on the understanding of tourism from the perspectives of travelers and destinations, while identifying tourism's economic, socio-cultural, and environmental impacts on communities. Typically offered Fall Spring.

15-16 Credits

Fall 2nd Year

HTM 18100 - Lodging Management

Credit Hours: 3.00. Organization, management and operating procedures of lodging facilities. Guest-employee interactions will be analyzed along with current trends and cutting edge topics in the lodging industry. A history of the lodging industry will be discussed. Typically offered Fall Spring.

HTM 19100 - Sanitation And Health In Foodservice, Lodging, And Tourism

Credit Hours: 3.00. This course introduces students to the foodservice component of the Hospitality and Tourism industry and explores food safety and other health related issues. Application of sanitation principles in restaurants, hospitals, schools, hotels, cruise ships, airlines, and international travel are covered. Students must pass a National Sanitation Certification Examination to receive credit. Typically offered Fall Spring.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

ECON 25200 - Macroeconomics

Credit Hours: 3.00. Introduction to macroeconomic theory. The course develops a theoretical framework permitting an analysis of the forces affecting national income, employment, interest rates, and the rate of inflation. Emphasis is placed upon the role of government fiscal and monetary policy in promoting economic growth and stable prices. Typically offered Fall Spring Summer. CTL:ISH 1041 Macroeconomics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

HTM 14100 - Financial Accounting For The Service Industries

Credit Hours: 3.00. Fundamental accounting principles and procedures applied to the hospitality and service industries. Includes study of the uniform system of accounts, financial statements, special purpose journals, and subsidiary ledgers unique to the hospitality and service industries. Typically offered Summer Fall Spring.

HTM 23100 - Hospitality And Tourism Marketing

Credit Hours: 3.00. This course teaches students a customer-oriented approach to marketing in hospitality and tourism. The role of marketing in an organization's overall strategic plan is emphasized. Techniques available to hotels, restaurants, and other tourism businesses are described and evaluated, including packaging, the travel trade, advertising, sales promotion, positioning and branding. Typically offered Fall Spring.

HTM 31200 - Human Resources Management For The Service Industries

Credit Hours: 3.00. The principles and practices of managing human resources for effective operations of hospitality and tourism businesses will be covered including: analysis and design of work, recruiting, selection, training and development, performance management, compensation, employee relations, and strategies for supporting organizational strategies. Typically offered Fall Spring.

HTM 24100 - Managerial Accounting And Financial Management In Hospitality Operations

Credit Hours: 3.00. Managerial and financial analyses of numerical data used for decision-making. Consideration of systems, techniques, information types, and presentational forms used by hospitality management. Emphasis on situations oriented to the hospitality industry. Typically offered Summer Fall Spring.

CS 23500 - Introduction To Organizational Computing

Credit Hours: 3.00. People and organizations, decision-making, information systems, telecommunications, desktop systems, integration tools, collaboration and groupware, multimedia, authoring multimedia documents, emerging technologies. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

NUTR 20200 - Principles Of Food Preparation And Nutrition

Credit Hours: 4.00. Chemical, physical, microbiological, and nutritional principles of food preparation. Functions and sources of nutrients, their relationship to a healthy lifestyle and incorporating the benefits into marketing of foodservice. Typically offered Fall Spring.

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

HTM 21200 - Organization And Management In The Hospitality And Tourism Industry

Credit Hours: 3.00. Basic principles of planning, organizing, directing, and controlling human and physical resources will be addressed. Students will also learn how these principles can be applied to maximize the organizational effectiveness of hospitality and tourism businesses. Typically offered Fall Spring.

15-16 Credits

Spring 2nd Year

CS 23500 - Introduction To Organizational Computing

Credit Hours: 3.00. People and organizations, decision-making, information systems, telecommunications, desktop systems, integration tools, collaboration and groupware, multimedia, authoring multimedia documents, emerging technologies. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

HTM 24100 - Managerial Accounting And Financial Management In Hospitality Operations

Credit Hours: 3.00. Managerial and financial analyses of numerical data used for decision-making. Consideration of systems, techniques, information types, and presentational forms used by hospitality management. Emphasis on situations oriented to the hospitality industry. Typically offered Summer Fall Spring.

- HTM Select Course - Credit Hours: 3.00 or

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

- Science - Credit Hours: 3.00 *

HTM 31200 - Human Resources Management For The Service Industries

Credit Hours: 3.00. The principles and practices of managing human resources for effective operations of hospitality and tourism businesses will be covered including: analysis and design of work, recruiting, selection, training and development, performance management, compensation, employee relations, and strategies for supporting organizational strategies. Typically offered Fall Spring.

HTM 23100 - Hospitality And Tourism Marketing

Credit Hours: 3.00. This course teaches students a customer-oriented approach to marketing in hospitality and tourism. The role of marketing in an organization's overall strategic plan is emphasized. Techniques available to hotels, restaurants, and other tourism businesses are described and evaluated, including packaging, the travel trade, advertising, sales promotion, positioning and branding. Typically offered Fall Spring.

HTM 21200 - Organization And Management In The Hospitality And Tourism Industry

Credit Hours: 3.00. Basic principles of planning, organizing, directing, and controlling human and physical resources will be addressed. Students will also learn how these principles can be applied to maximize the organizational effectiveness of hospitality and tourism businesses. Typically offered Fall Spring.

NUTR 20200 - Principles Of Food Preparation And Nutrition

Credit Hours: 4.00. Chemical, physical, microbiological, and nutritional principles of food preparation. Functions and sources of nutrients, their relationship to a healthy lifestyle and incorporating the benefits into marketing of foodservice. Typically offered Fall Spring.

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

HTM 20200 - Hospitality And Tourism Work Experience

Credit Hours: 1.00. This course is a supervised paid industry work experience in the hospitality and tourism industry. Students are required to present a signed agreement from their employer prior to initiating employment. Students are also required to prepare a series of work and reflective reports. A minimum of 320 work hours is required for completion during either a summer or semester period. Typically offered Summer.

16-17 Credits

Fall 3rd Year

HTM 34100 - Cost Controls In Foodservice And Lodging

Credit Hours: 3.00. Application of cost controls; development of cost-reduction methods through management policy and decisions; examination of cost-control techniques for food, labor, and supplies in addition to the emphasis on beverage management control. Typically offered Fall Spring.

HTM 32200 - Hospitality Facilities Management

Credit Hours: 3.00. Technical and managerial issues relating to the operation and maintenance of the physical plant and equipment in hospitality industry facilities. Typically offered Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality,

intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

- HTM Select Course - Credit Hours: 3.00
- Science, Technology & Society - Credit Hours: 3.00 *

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

HTM 32200 - Hospitality Facilities Management

Credit Hours: 3.00. Technical and managerial issues relating to the operation and maintenance of the physical plant and equipment in hospitality industry facilities. Typically offered Fall Spring.

HTM 34100 - Cost Controls In Foodservice And Lodging

Credit Hours: 3.00. Application of cost controls; development of cost-reduction methods through management policy and decisions; examination of cost-control techniques for food, labor, and supplies in addition to the emphasis on beverage management control. Typically offered Fall Spring.

HTM 29102 - Introduction To Foodservice Management

Credit Hours: 2.00. An introduction to food preparation methods and service techniques in quantity food settings. Students become familiar with ingredients and culinary terminology, and learn to read, write and evaluate menus. Recipe conversion, inventory and costing skills are developed. Production methods and product flow are examined. Front-of-the-house service techniques as well as front-and-back-of-the-house interactions will be studied. Typically offered Fall Spring.

HTM 38110 - Revenue Management In The Lodging Industry

Credit Hours: 3.00. This course will add to and build upon the knowledge acquired in HTM 18100 - Lodging Management. The class will provide a theoretical perspective on service management and how service management concepts can be applied to the hospitality business. The course will also provide an understanding of revenue management's key concepts and applicability of revenue maximization strategies and their operational aspects, components of effective revenue management will be analyzed and its effects on overall profitability. The course will also review the latest issues and trends affecting all aspects and segments of the lodging industry. Typically offered Fall Spring.

HTM 29101 - Quantity Food Production And Service Laboratory

Credit Hours: 2.00. Basic knowledge of foodservice operations. Students learn and develop food production and service skills in the Boiler Bristo and the John Purdue Room. Students are exposed to quantity cooking methods, the use and care of equipment, and service techniques as they rotate through various positions commonly found in foodservice operations. All aspects of the dining experience are experienced by students. National Sanitation Certification needed. Typically offered Fall Spring.

- Elective - Credit Hours: 2.00
- Elective - Credit Hours: 1.00 or

HTM 49111 - Beverage Operation Management

Credit Hours: 1.00. This course teaches students the historical background and modern day principles and management practices regarding the production, selection, purchasing, storage and service of beverage alcohol in all aspects of the hospitality industry. Certification in State of Indiana Responsible Service of Alcohol program is required to earn course credit. Students must be at least 21 years of age. Permission of department required. Typically offered Fall Spring.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

HTM 30200 - Hospitality And Tourism Industry Internship

Credit Hours: 1.00 to 2.00. This course is a supervised and structured industry internship experience. Students are required to obtain a signed internship learning agreement with an employer prior to starting the internship. The internship consists of rotations through at least 3 functional areas. Students are also required to prepare comprehensive written management reports reflecting upon their internship experience and present employer evaluation. Variable credits with a minimum of 320 work hours needed for each credit hour or 640 for two credit hours. Typically offered Summer.

15-16 Credits

Fall 4th Year

HTM 49200 - Advanced Foodservice Management

Credit Hours: 4.00. Utilize managerial skills and techniques with planning, organizing, directing and controlling a full service restaurant operation. Management teams of two to three students develop, market, and operate a restaurant that is open to the public. Emphasis is placed on utilizing effective management skills to create a high quality, profitable operation with well planned systems and highly motivated, organized employees. Typically offered Fall Spring.

HTM 41100 - Hospitality And Tourism Law

Credit Hours: 3.00. Overview of the fundamental legal framework that governs the conduct of hospitality and tourism managers. Topics include civil rights, contracts, court procedures, ethics, and risk management. Typically offered Fall Spring.

HTM 38110 - Revenue Management In The Lodging Industry

Credit Hours: 3.00. This course will add to and build upon the knowledge acquired in HTM 18100 - Lodging Management. The class will provide a theoretical perspective on service management and how service management concepts can be applied to the hospitality business. The course will also provide an understanding of revenue management's key concepts and applicability of revenue maximization strategies and their operational aspects, components of effective revenue management will be analyzed and its effects on overall profitability. The course will also review the latest issues and trends affecting all aspects and segments of the lodging industry. Typically offered Fall Spring.

HTM 29102 - Introduction To Foodservice Management

Credit Hours: 2.00. An introduction to food preparation methods and service techniques in quantity food settings. Students become familiar with ingredients and culinary terminology, and learn to read, write and evaluate menus. Recipe conversion, inventory and costing skills are developed. Production methods and product flow are examined. Front-of-the-house service techniques as well as front-and-back-of-the-house interactions will be studied. Typically offered Fall Spring.

- Elective - Credit Hours: 2.00 or

HTM 29101 - Quantity Food Production And Service Laboratory

Credit Hours: 2.00. Basic knowledge of foodservice operations. Students learn and develop food production and service skills in the Boiler Bristo and the John Purdue Room. Students are exposed to quantity cooking methods, the use and care of equipment, and service techniques as they rotate through various positions commonly found in foodservice operations. All aspects of the dining experience are experienced by students. National Sanitation Certification needed. Typically offered Fall Spring.

- HTM Select Course - Credit Hours: 3.00 or

HTM 49900 - Feasibility Studies And Business Development In Hospitality And Tourism

Credit Hours: 3.00. The study of business development. The course will cover all stages in the feasibility and development process. Emphasis will be on strategic planning, design of systems, models and problem analysis, leading to the opening of a successful hospitality or tourism business. Typically offered Fall Spring.

HTM 49111 - Beverage Operation Management

Credit Hours: 1.00. This course teaches students the historical background and modern day principles and management practices regarding the production, selection, purchasing, storage and service of beverage alcohol in all aspects of the hospitality industry. Certification in State of Indiana Responsible Service of Alcohol program is required to earn course credit. Students must be at least 21 years of age. Permission of department required. Typically offered Fall Spring.

- Elective - Credit Hours: 1.00
- Elective - Credit Hours: 2.00

13-15 Credits

Spring 4th Year

HTM 41100 - Hospitality And Tourism Law

Credit Hours: 3.00. Overview of the fundamental legal framework that governs the conduct of hospitality and tourism managers. Topics include civil rights, contracts, court procedures, ethics, and risk management. Typically offered Fall Spring.

HTM 49200 - Advanced Foodservice Management

Credit Hours: 4.00. Utilize managerial skills and techniques with planning, organizing, directing and controlling a full service restaurant operation. Management teams of two to three students develop, market, and operate a restaurant that is open to the public. Emphasis is placed on utilizing effective management skills to create a high quality, profitable operation with well planned systems and highly motivated, organized employees. Typically offered Fall Spring.

HTM 49900 - Feasibility Studies And Business Development In Hospitality And Tourism

Credit Hours: 3.00. The study of business development. The course will cover all stages in the feasibility and development process. Emphasis will be on strategic planning, design of systems, models and problem analysis, leading to the opening of a successful hospitality or tourism business. Typically offered Fall Spring.

- HTM Select Course - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15-16 Credits

Notes

*Satisfies a University Core Requirement

**Satisfies a Non-departmental Major Course Requirement

Students must earn a "C-" or better in all required HTM courses.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Event and Meeting Management Minor

Program Requirements

HTM 16200 - Introduction To Event And Meeting Planning Industry

Credit Hours: 3.00. Upon completion of this course, students will have a comprehensive overview of the event and meeting industry. Topics will include the supply and demand side of event and meeting management, the basic planning process needed for any event or meeting, sustainability, business ethics, and keeping pace with current industry trends through guest lectures from event and meeting planners. Typically offered Fall Spring.

HTM 17300 - Introduction To Tourism Management

Credit Hours: 3.00. This is an introduction to tourism management using a system approach that integrates a variety of hospitality and travel organizations and businesses. It focuses on the understanding of tourism from the perspectives of travelers and destinations, while identifying tourism's economic, socio-cultural, and environmental impacts on communities. Typically offered Fall Spring.

HTM 26200 - Festivals And Special Events

Credit Hours: 3.00. This course offers a comprehensive overview of the theory and procedures associated with the coordination of festivals and special events. Essential topics will include the conceptualization, planning, coordination, sponsorship, marketing, funding, staffing, legal issues, and assessment of festivals and special events. Students will gain hands-on experience by volunteering to work a minimum of six hours to set up, help coordinate, or tear down a large scale festival or special event. Typically offered Fall Spring.

HTM 36200 - Event And Meeting Management

Credit Hours: 3.00. The principles and practices of event and meeting management will be covered in this course, including: strategic event planning process, project management, risk management, financial management, human resources, stakeholder management, meeting or event design, site location and management, marketing, professionalism, and ethics. Students will gain hands-on experience planning, directing, organizing and controlling a small scale event. Typically offered Fall Spring.

HTM 46200 - Advanced Event And Meeting Management

Credit Hours: 3.00. Advanced aspects of meeting and event management principles and practices will be covered in this course. A focus is placed on: strategic planning, project management, finance and risk management, event design, site management, and ethics. Typically offered Fall Spring.

15 Credits

HTM International Studies Minor

Available only to students in the Departments of Hospitality & Tourism Management or Consumer Sciences & Retailing

I. Approved full-time Work or Study Abroad (Minimum 12 weeks)

Full-time employment, internship, study abroad or combination

II. Foreign Language (minimum 6 credit hours in the same language)

III. International Focus Coursework (15 credit hours - minimum of 6 credit hours in non-HTM courses, and minimum of 6 credit hours in HTM courses)

a. Non-HTM courses (6 credit hours)

See below for choices

- Regional or country focus
- Global Issues

b. HTM courses (6 credit hours)

HTM 37200 - Global Tourism Geography

Credit Hours: 3.00. Introduction and analysis of specific world travel destinations, including the exploration of geographic features, customs and tradition, population centers, visitor attractions, political, religious, language and other cultural differences as these relate to the hospitality and travel industry. The course is designed to teach students specific geographic knowledge, and develop a deeper understanding and empathy for cultural values and traditions that exist outside their own culture. Typically offered Fall.

HTM 39800 - International Special Topics

Credit Hours: 1.00 to 6.00. Course taken during an international experience that is recognized by the University. Typically offered Summer Fall Spring.

HTM 39000 - Undergraduate Special Problems

Credit Hours: 0.00 to 6.00. Individual or group participation in supervised reading, laboratory experiences, field experiences, or research in special areas of the field. Permission of instructor required. Typically offered Fall Spring Summer.

c. Additional 3 credits of International focus coursework

International Focus Coursework:

1. Non-HTM Course Choices - regional or country focus

Select one:

CHNS 28000 - Topics in Chinese Civilization and Culture

Credit Hours: 3.00. Selected topics on Chinese civilization and culture including history and geography, Confucianism, contemporary China, education, family, international cultural and economic cooperation. Course materials also cover most current issues on and in Chinese-speaking communities. Lectures in English. Typically offered Fall Spring.

HIST 24000 - East Asia And Its Historic Tradition

Credit Hours: 3.00. Survey of the great historic traditions of China, Japan, and Korea from earliest times to approximately 1600, with special attention to state formation, society, intellectual, philosophical, and religious developments, and the visual, musical, and literary arts. Typically offered Fall.

HIST 24100 - East Asia In The Modern World

Credit Hours: 3.00. The response of China, Japan, and Korea to the coming of the West in modern times, with special stress on the effect of Western ideas and machines. Approximately 1600 to the present. Typically offered Spring.

HIST 33900 - Traditional China

Credit Hours: 3.00. Chinese civilization from its origins to the end of the Ming Dynasty. Attention is divided equally between political and cultural history, giving emphasis to the development of traditional institutions in Chinese society as well as to art, literature, religion, and philosophy. Typically offered Fall.

2. Non-HTM Course Choices - global issues

Select one:

COM 22400 - Communicating In The Global Workplace

Credit Hours: 3.00. This introductory course explores communication issues that arise in the global workplace. The course develops an appreciation of the relationship among culture, communication, and ways of organizing and doing business. Typically offered Fall.

CSR 33200 - Cross-Cultural Marketing And International Retailing

Credit Hours: 3.00. Examination of marketing/retail practices used to target domestic and global consumer market segments. Development of successful retail and marketing strategies is stressed. Typically offered Fall Spring.

HIST 10400 - Introduction To The Modern World

Credit Hours: 3.00. Traces the expansion of Europe into the Americas, Africa, and Asia. The French Revolution, nationalism, and the development of western European states from the era of the Reformation to the present are studied. Typically offered Fall Spring Summer.

HIST 10500 - Survey Of Global History

Credit Hours: 3.00. A survey of the interaction between the civilizations of Asia, Africa, Europe, and the Americas since 1500, with attention to cultural comparisons over time, and to the implications of global interdependence for the environment, health, economy, and geopolitics. Typically offered Fall Spring Summer.

PHIL 20600 - Philosophy Of Religion

Credit Hours: 3.00. The course encourages critical reflection on traditional and contemporary views about God and other religious ideas. Topics include arguments for God's existence, the problem of evil, understanding the divine attributes, miracles, religious pluralism, and life after death. Typically offered Summer Fall Spring. CTL:ISH 1052 Philosophy Of Religion

POL 13000 - Introduction To International Relations

Credit Hours: 3.00. An analysis of the fundamentals of international law, organization, and politics, particularly as relevant to contemporary international relations. Typically offered Summer Fall Spring. CTL:ISH 1003 Introduction To World Politics

POL 14100 - Governments Of The World

Credit Hours: 3.00. An introduction to the politics and government in selected foreign countries. The course presents the tools and background needed to understand contemporary events in the world beyond the United States. Readings and discussions pay special attention to democratization and development. Typically offered Summer Fall Spring.

POL 23500 - International Relations Among Rich And Poor Nations

Credit Hours: 3.00. Introduction to the major themes in the contemporary international relations among rich and poor nations. Examines such areas as North-South relations, interdependence, international organizations, and global development. Typically offered Fall Spring.

Department of Human Development and Family Studies

About

The Department of Human Development and Family Studies contributes to the well-being of individuals and families across the life course and in diverse contexts by generating knowledge; by preparing specialists for research, teaching, leadership, and professional practice; and by strengthening the interconnections of research, practice, and policy.

The department is widely regarded as a leader in the study of children and families. The department's academic programs prepare specialists at the bachelor's and PhD levels. Faculty conduct significant research on a range of critical issues facing individuals and families in today's society. And, the department employs innovative outreach efforts that extend knowledge to policymakers, employers, professionals, and citizens in Indiana and beyond.

Faculty

<http://www.purdue.edu/hhs/hdfs/directory/faculty/index.php>

Contact Information

Administration

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Graduate Information

For Graduate Information please see Human Development and Family Studies Graduate Program Information.

Developmental and Family Science, BS

About the Program

The Developmental and Family Science curriculum allows students to take an interdisciplinary approach to studying families and human development across the lifespan. Students receive a broad education in human development and family studies, with many opportunities for specialization, including optional concentrations in child development or family and community health. The major culminates in a capstone experience, designed by the student from among three choices: an internship, a research thesis, or a study abroad experience. This degree will prepare you to work with families in the contexts of schools and communities or for you to pursue an advanced academic degree.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Developmental and Family Science include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HDFS-BS
DVFS
120 credits

Major Requirements (31-39 credits)

HDFS 10000 - Orientation To Current Issues In Human Development And Family Studies

Credit Hours: 1.00. Introduction to fields related to Human Development and Family studies, including majors and career paths. You will meet faculty, alumni, and professionals working in related areas. You will be matched with an advanced student mentor who will help you learn how to become successful as a HDFS student any beyond. Required of all students majoring in the department. Non-majors interested in learning more about HDFS majors are also welcome. Typically offered Fall.

HDFS 20100 - Introduction To Family Processes

Credit Hours: 3.00. An examination of the interpersonal processes that take place within family contexts. Emphasis is on family dynamics. Also considered are linkages between family processes and the broader social environment. Basic components of the research process will be introduced. Typically offered Fall Spring Summer.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HDFS 28000 - Diversity In Individual And Family Life

Credit Hours: 3.00. Students are introduced to aspects of individual and family life in diverse cultures, particularly racially and/or ethnically diverse families in the United States. The nature of relationships between dominant and minority cultures is considered. Implications of diversity for practice with diverse populations are emphasized throughout the course. Typically offered Fall Spring Summer.

HDFS 34600 - Research Design And Program Evaluation

Credit Hours: 3.00. This course is an introduction to research methods as used in community programs for children and families including review and application of existing research literature, generating research questions, conducting program needs assessments, evaluating processes and outcomes of existing programs, designing and interpreting applied research studies, and understanding ethical responsibilities in the use and application of research. Instruction has been designed to provide the skills necessary to use existing research and generate new data to benefit programs. Typically offered Fall Spring.

Advanced Content Courses Selective - (Select 6 credits)

NOTE: Courses may not be double-counted to fulfill both this requirement and a concentration requirement.

HDFS 30500 - Biosocial Foundations Of The Family

Credit Hours: 3.00. Family ties and family processes in the promotion of individual health and management of disease across the life course are covered. Course reviews research on families and health from multiple disciplinary perspectives. Typically offered Fall Spring.

HDFS 31100 - Child Development

Credit Hours: 3.00. This course addresses the study of development from infancy through childhood. It includes processes of physical, cognitive, language, social, and emotional development. Processes are discussed within the framework of historical and contemporary theories and current research. In addition, it covers topics related to methodologies used in the study of infant and child development. Finally, the conditions of children in different parts of the world are considered. Typically offered Fall Spring.

HDFS 31200 - Adult Development

Credit Hours: 3.00. An in-depth study of developmental processes from the transition to adulthood through old age. Particular emphasis is placed on understanding the influence of contexts on adult development. Typically offered Fall Spring.

HDFS 31300 - Adolescent Development

Credit Hours: 3.00. An overview of the normative developmental changes that occur during adolescence, with specific attention to individual and relational adjustment. Typically offered Fall Spring.

HDFS 33000 - Sexuality And Family Life

Credit Hours: 3.00. Provides the student with a basic knowledge of human sexuality as it pertains to individuals, couples and families. The course is designed to be helpful to students who will become family life educators as well as to be helpful to students as individuals, spouses, and parents. Typically offered Fall Spring.

HDFS 33200 - Stress And Coping In Contemporary Families

Credit Hours: 3.00. Examines theoretical perspectives related to family stress and resilience in multicultural and diverse family settings, and connects these perspectives to empirical work on family dynamics, coping, and dysfunction across the lifespan. Topics such as economic stress and poverty, immigrant families, single-parent families, homeless families, adoption, military families, maltreatment, and families coping with illness are explored. The class focuses on environmental, cultural, as well as biological contributions to both risk and resilience processes in individuals and families. Typically offered Fall Spring

HDFS Selectives (Select 6-12 credits)

If completing a concentration, student must complete 6 credits of HDFS Selectives.

If NOT completing a concentration, student must complete 12 credits of HDFS Selectives.

Courses may not be double-counted to fulfill both this requirement and a concentration or capstone requirement.

- HDFS course - Credit Hours: 3.00
- HDFS course - Credit Hours: 3.00
- HDFS course - Credit Hours: 3.00
- HDFS course - Credit Hours: 3.00

Capstone Experience (6-8 credits)

Students must propose their capstone plan and receive Undergraduate Committee (Capstone Subcommittee) approval. All capstones must be clearly relevant to the major.

If the student is completing a concentration, the capstone experience must have a clear connection to the student's designated concentration.

Select ONE of the following:

Thesis Option

Must have completed statistics requirement and HDFS 34600 before beginning thesis capstone. The six credits of HDFS 49100 must be completed across two consecutive semesters.

- HDFS 49100 - Mentored Research In Human Development And Family Studies
- HDFS 49100 - Mentored Research In Human Development And Family Studies

Internship Option

- HDFS 45400 - Career Assessment And Professional Development
- HDFS 45800 - Development And Family Science Capstone Internship

Study Abroad Option

- Study Abroad experience - Credit Hours: 6.00

OR

- Study Abroad experience - Credit Hours: 3.00
- Select additional course from Global Perspectives & International Cultures List - Credit Hours: 3.00

OR

- Study Abroad experience - Credit Hours: 3.00
- Fourth semester of foreign language (must be same language as in "Required Courses in Other Departments" section above) - Credit Hours: 3.00

Required Courses in Other Departments (39-46 credits)

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

COM 20400 - Critical Perspectives On Communication

Credit Hours: 3.00. Introduction to critical thinking and writing about communication. Draws on humanistic and qualitative traditions to help students learn and apply critical approaches to understanding communication. . Typically offered Summer Fall Spring.

(IF ENGL 10600 selected, fulfills Written Communication and Information Literacy Cores)

- 10100 Foreign Language - (Total of 9 credits - must be from one language) - Credit Hours: 3.00
- 10200 - Credit Hours: 3.00
- 20100 - Credit Hours: 3.00
- Global Perspectives & International Cultures Selective - select from list - Credit Hours: 3.00
- Human Health Selective - select from list - Credit Hours: 3.00

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

SOC 38200 - Introduction To Statistics In Sociology

Credit Hours: 3.00. Introduction to the basic techniques of statistical analysis applicable to sociological data. Elementary descriptive statistics and statistical inference. Introduction to multivariate analysis. Typically offered Fall Spring.

PSY 20100 - Introduction To Statistics In Psychology

Credit Hours: 3.00. An introduction to the development and application of statistical, quantitative, and measurement techniques pertinent to the psychological sciences. Fundamental concepts of numerical assignment, sampling theory, distribution functions, experimental design, inferential procedures, and statistical control. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

(If STAT 11300 or STAT 30100 selected, fulfills Information Literacy Core)

- [Humanities Core] - select from University list - Credit Hours: 3.00

- [Information Literacy Core] - select from University list (IF ENGL 10600, STAT 11300, or STAT 30100 is selected for other requirements, this requirement is fulfilled) - Credit Hours 0.00 - 3.00
- [Oral Communication Core] - select from University list - Credit Hours: 3.00
- [Quantitative Reasoning] - select course numbered 15300 or above from University list (MA 15555 is recommended) - Credit Hours: 3.00
- [Science Core] - select from University list - Credit Hours: 3.00
- [Science Core] - select from University list - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list (IF STAT 11300 is selected for other requirements, this requirement is fulfilled)

Electives (35-50 credits)

When selecting electives, note that 32 credits of upper division (300/400 level) classes must be completed to meet graduation requirements.

At least 32 credits of coursework required at 300 level or higher to meet graduation requirements

120 semester credits required for Bachelor of Science degree

Optional Concentrations

Child Development Concentration - CHLV (11 credits)

- HDFS 21200 - Child Observation Practicum
- HDFS 31000 - Guidance In Early Childhood or HDFS 34100 - Working With Parents
- HDFS 31100 - Child Development
- HDFS 31300 - Adolescent Development or HDFS 42000 - Developmental Foundations Of Infant And Toddler Curriculum

Family & Community Health Concentration - FCHL (11 credits)

- HDFS 30500 - Biosocial Foundations Of The Family
- HDFS 32500 - Health And Health Care For Children And Families or HK 22600 - Contemporary Women's Health
- HDFS 59000 - Special Problems
- NUR 22201 - Population Health

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Human Health Selective List

ANTH 34000 - Global Perspectives On Health

Credit Hours: 3.00. This course examines health issues and risks faced by individuals around the world, but especially in resource poor geographical areas. We will explore in-depth the gendered, ethnic, cultural, and class dimensions that underlie the patterning of disease and illness worldwide. Typically offered Fall Spring.

HK 22600 - Contemporary Women's Health

Credit Hours: 3.00. Examines behavioral, psychological, and sociocultural aspects of women's experience in healthcare systems. Includes the influence of factors such as age, social class, and ethnicity on women's roles as recipients and providers of health care. Typically offered Fall Spring.

HK 23100 - Substance Abuse And Health

Credit Hours: 3.00. The study of drug abuse and drug education, including stimulants, depressants, psychedelics, and other drugs and harmful substances; beverage alcohol usage and health effects of tobacco smoking. Education materials and techniques are examined. Typically offered Summer Fall Spring.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

Global Perspectives & International Cultures List

ANTH 23000 - Gender Across Cultures

Credit Hours: 3.00. Explores gender and sexuality from a cross-cultural perspective. Draws on case studies to explore the complexities of women's and men's lives. Examines gender hierarchies, gender in a globalized world, and the cultural construction of sexuality and gender. Typically offered Summer Fall Spring.

ARAB 28000 - Arabic Culture

Credit Hours: 3.00. A historical and literary survey of defining characteristics of Arabic culture from pre-Islamic times to the modern period. Typically offered Summer Fall Spring.

ARAB 23900 - Arab Women Writers

Credit Hours: 3.00. Survey of Arab women writers from North Africa, the Middle East, and Arab communities in the western world. Emphasis on issues of sexuality, marriage, work, travel and immigration. Conducted in English; no knowledge of Arabic required. Typically offered Fall Spring.

ARAB 28100 - Introduction To Islamic Civilization And Culture

Credit Hours: 3.00. This course is a survey of broad currents in the cultures, thought and civilization of the Muslim world. It emphasizes religious, intellectual and cultural trends, social and political structures and contemporary issues of Muslim societies within the current global cultural world. Taught in English. Typically offered Fall Spring Summer.

CHNS 23000 - Chinese Literature In Translation

Credit Hours: 3.00. Reading and discussion of selected texts from major writers and genres. The course provides a broad survey of the Chinese literary tradition and its cultural and historical background. Emphasis may vary from year to year. Knowledge of Chinese not required. Typically offered Fall Spring.

CHNS 28000 - Topics in Chinese Civilization and Culture

Credit Hours: 3.00. Selected topics on Chinese civilization and culture including history and geography, Confucianism, contemporary China, education, family, international cultural and economic cooperation. Course materials also cover most current issues on and in Chinese-speaking communities. Lectures in English. Typically offered Fall Spring.

CLCS 18100 - Classical World Civilizations

Credit Hours: 3.00. Course introduces students to "Classical" civilizations on three continents (Europe, Africa, and Asia) demonstrably interconnected by an ancient world system. Course focuses on essential themes of past civilization: religion, philosophy, surviving texts, gender relations, urbanism, technology, social and political formations. Typically offered Summer Fall Spring.

CMPL 26700 - World Literature: From 1700 A D To The Present

Credit Hours: 3.00. (ENGL 26700) World literature in translation. A comparative and chronological survey of the masterpieces of Eastern and Western literature. Typically offered Spring Summer Fall.

FR 23000 - French Literature In Translation

Credit Hours: 3.00. Reading and analysis of selected French writers and their works, with particular emphasis on the social, political, and intellectual climate of their times. The course content will change from semester to semester. Knowledge of French not required. Typically offered Fall Spring Summer.

FR 33000 - French Cinema

Credit Hours: 3.00. A general survey of major French cinematic trends from the earliest examples (Melies, Lumiere) to the New Wave (Chabrol, Truffaut, Resnais, Godard, etc.), with a discussion of the historical, social, political, aesthetic, and literary contexts. The French film in relation to world cinema. The relationship between the French cinema and French literature. Reading and analysis of scripts and historical and critical materials. Knowledge of French not required. Typically offered Fall Spring Summer.

GER 23000 - German Literature In Translation

Credit Hours: 3.00. Reading and analysis of selected German writers and their works, with particular emphasis on the social, political, and intellectual climate of the times. The course content will change from semester to semester. Knowledge of German not required. Typically offered Fall Spring Summer.

GER 33000 - German Cinema

Credit Hours: 3.00. Viewing and analysis of major German contributions to the cinema from the earliest period to the present. Emphasis on relevant aesthetic theories and on the schools of literature and painting that served as sources. Evaluation of the German film on the basis of social, artistic, and political criteria. Knowledge of German not required. Typically offered Fall Spring Summer.

HIST 34000 - Modern China

Credit Hours: 3.00. Chinese history from the Qing Dynasty (1644) to the present, with emphasis on the period since 1800. Attention given to internal developments and China's response to Western thought and material accomplishments. Nationalism and communism in the twentieth century are examined. Typically offered Spring.

ITAL 28000 - Italian Culture And Civilization

Credit Hours: 3.00. Course focuses on salient aspects of Italian culture and civilization from the Middle Ages to the present. In English. Typically offered Fall Spring Summer.

ITAL 33000 - The Italian Cinema

Credit Hours: 3.00. The development and evolution of Italian cinema after World War II. The class will center on the viewing and discussion of films and will survey a broad spectrum of directors and styles. Knowledge of Italian not required. Typically offered Fall Spring Summer.

JPNS 23000 - Japanese Literature In Translation

Credit Hours: 3.00. Reading and discussion of selected texts from major writers and genres. The course provides a broad survey of the Japanese literary tradition and its cultural and historical background. Emphasis may vary from year to year. Knowledge of Japanese not required. Typically offered Fall Spring.

JPNS 33000 - Japanese Cinema

Credit Hours: 3.00. A survey of the development of Japanese cinema after World War II. The class focuses on the viewing and discussion of the films and examines a variety of directors with different styles and thematic messages. Typically offered Fall Spring.

LC 23500 - East Asian Literature In Translation

Credit Hours: 3.00. Reading and discussion of selected East Asian poetry, prose, and drama. Focus will be on the traditions of China and Japan, but may include works of other cultures such as Korea. Emphasis may vary yearly, stressing traditional or modern literatures. Typically offered Fall Spring.

LC 23900 - Women Writers In Translation

Credit Hours: 3.00. An examination of international female writers' literary creativity in the context of women's studies and feminist theory, as articulated in their specific cultural and geographical milieu. Course content will vary in terms of cultural focus. In English. Typically offered Fall Spring Summer.

PHIL 11400 - Global Moral Issues

Credit Hours: 3.00. A systematic and representative examination of significant contemporary moral problems with a focus on global issues such as international justice, poverty and foreign aid, nationalism and patriotism, just war, population and the environment, human rights, gender equality, and national self-determination. Typically offered Fall Spring Summer.

PHIL 23000 - Religions Of The East

Credit Hours: 3.00. (REL 23000) A study of the history, teachings, and present institutions of the religions of India, Southeast Asia, China, and Japan. This will include Hinduism, Jainism, Sikhism, Buddhism, Confucianism, Taoism, Shintoism, and Zoroastrianism. Typically offered Fall Spring Summer.

POL 13000 - Introduction To International Relations

Credit Hours: 3.00. An analysis of the fundamentals of international law, organization, and politics, particularly as relevant to contemporary international relations. Typically offered Summer Fall Spring. CTL:ISH 1003 Introduction To World Politics

PTGS 33000 - Brazilian, Portuguese, And African Cinema

Credit Hours: 3.00. Screening and analysis of selected films from Portuguese- speaking countries: Brazil, Portugal, Angola, Mozambique, Cape Verde, Guinea-Bissau, S. Tome and Principe, with discussion of their cultural contexts (colonial/post-colonial societies; cross-Atlantic relationships; racial diversity; minority/majority issues). Knowledge of Portuguese not required. . Typically offered Summer Fall Spring.

RUSS 33000 - Russian And East European Cinema

Credit Hours: 3.00. Viewing and analysis of significant Russian and East European films. Evolution of the Russian and East European cinema, its place in world cinema, and its relation to cultural, political, and social trends. Cinematic adaptation of literary and theatrical works. Knowledge of Russian or East European languages not required. Typically offered Fall Spring Summer.

SPAN 33000 - Spanish And Latin American Cinema

Credit Hours: 3.00. Screening and analysis of selected Spanish and Latin American films with readings and discussions relative to their historical, social, political, aesthetic, literary, and linguistic contexts. No knowledge of Spanish required. Typically offered Fall Spring Summer.

Note

*Also fulfills Humanities University Foundational Core Requirement

Program Requirements

Fall 1st Year

HDFS 10000 - Orientation To Current Issues In Human Development And Family Studies

Credit Hours: 1.00. Introduction to fields related to Human Development and Family studies, including majors and career paths. You will meet faculty, alumni, and professionals working in related areas. You will be matched with an advanced student mentor who will help you learn how to become successful as a HDFS student any beyond. Required of all students majoring in the department. Non-majors interested in learning more about HDFS majors are also welcome. Typically offered Fall.

HDFS 20100 - Introduction To Family Processes

Credit Hours: 3.00. An examination of the interpersonal processes that take place within family contexts. Emphasis is on family dynamics. Also considered are linkages between family processes and the broader social environment. Basic components of the research process will be introduced. Typically offered Fall Spring Summer.

- CORE: Oral Communication - Credit Hours: 3.00

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

- Foreign Language - Credit Hours: 3.00

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

16 Credits

Spring 1st Year

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

- CORE: Science - Credit Hours: 3.00
- Gl. Perspectives & Int. Cultures - Credit Hours: 3.00
- Foreign Language - Credit Hours: 3.00

16 Credits

Fall 2nd Year

- CORE: Information Literacy - Credit Hours: 3.00
- CORE: Science - Credit Hours: 3.00

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

SOC 38200 - Introduction To Statistics In Sociology

Credit Hours: 3.00. Introduction to the basic techniques of statistical analysis applicable to sociological data. Elementary descriptive statistics and statistical inference. Introduction to multivariate analysis. Typically offered Fall Spring.

PSY 20100 - Introduction To Statistics In Psychology

Credit Hours: 3.00. An introduction to the development and application of statistical, quantitative, and measurement techniques pertinent to the psychological sciences. Fundamental concepts of numerical assignment, sampling theory, distribution functions, experimental design, inferential procedures, and statistical control. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

- Advanced Content Selective - Credit Hours: 3.00
- Foreign Language - Credit Hours: 3.00

15 Credits

Spring 2nd Year

HDFS 28000 - Diversity In Individual And Family Life

Credit Hours: 3.00. Students are introduced to aspects of individual and family life in diverse cultures, particularly racially and/or ethnically diverse families in the United States. The nature of relationships between dominant and minority cultures is considered. Implications of diversity for practice with diverse populations are emphasized throughout the course. Typically offered Fall Spring Summer.

- Human Health Selective - Credit Hours: 3.00
- Advanced Content Elective - Credit Hours: 3.00

HDFS 34600 - Research Design And Program Evaluation

Credit Hours: 3.00. This course is an introduction to research methods as used in community programs for children and families including review and application of existing research literature, generating research questions, conducting program needs assessments, evaluating processes and outcomes of existing programs, designing and interpreting applied research studies, and understanding ethical responsibilities in the use and application of research. Instruction has been designed to provide the skills necessary to use existing research and generate new data to benefit programs. Typically offered Fall Spring.

- CORE: Humanities - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- HDFS Selective - Credit Hours: 3.00
- Opt. Concentration Course or Elective - Credit Hours: 3.00
- CORE: Science, Technology, & Society - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- HDFS Selective - Credit Hours: 3.00
- Opt. Concentration Course or Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- Capstone Experience- Thesis, Study Abroad or Internship Option ² - Credit Hours: 2.00 - 6.00
- HDFS Selective¹ or Elective - Credit Hours: 3.00
- Opt. Concentration Course or Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00
- Elective(s) - Credit Hours: 0.00 - 4.00

14 Credits

Spring 4th Year

- Capstone Experience- Thesis, Study Abroad or Internship Option ² - Credit Hours: 2.00 - 6.00
- HDFS Selective¹ or Elective - Credit Hours: 3.00
- Opt. Concentration Course or Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00
- Elective(s) - Credit Hours: 0.00 - 4.00

14 Credits

Note

Total credits needed for graduation: 120

Upper division (300 and 400 level) credits needed for graduation: 32

¹ If not doing an optional concentration, students must complete 12 hours of HDFS Selectives.

² There is also a Study Abroad Capstone Experience option. Courses and credit hours are dependent upon the Capstone Experience that you choose. Please see your academic advisor for further information.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Early Childhood Education and Exceptional Needs, BS

About the Program

If you have thought about working with young children, young children with special needs or even directing educational child care programs, then the early childhood education and exceptional needs major is for you.

ECEEN students develop skills for working with typically developing children as well as children with exceptional needs and their families. Students are prepared to work with children from birth through 3rd grade.

Students complete a program that prepares them to apply for teacher licensure in Indiana as Early Childhood Generalist and Exceptional Needs through grade 3. Through their degree and licensure program, students are prepared to work in early intervention programs, pre-kindergarten classrooms in schools and community programs, and early childhood regular and special education classrooms in public or private schools, kindergarten through 3rd grade.

Students receive hands-on experience at the Ben and Maxine Miller Child Development Laboratory School, in community schools and other early childhood programs as well as completing a semester as a student teacher in an early childhood program in a child development center, public or private school.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Early Childhood Education and Exceptional Needs include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HDFS-BS
ECED
120 credits

Major Requirements - Content Courses (73 credits)

Maintain a minimum Content GPA of 2.80/4.00

HDFS 10000 - Orientation To Current Issues In Human Development And Family Studies

Credit Hours: 1.00. Introduction to fields related to Human Development and Family studies, including majors and career paths. You will meet faculty, alumni, and professionals working in related areas. You will be matched with an advanced student mentor who will help you learn how to become successful as a HDFS student any beyond. Required of all students majoring in the department. Non-majors interested in learning more about HDFS majors are also welcome. Typically offered Fall.

HDFS 20100 - Introduction To Family Processes

Credit Hours: 3.00. An examination of the interpersonal processes that take place within family contexts. Emphasis is on family dynamics. Also considered are linkages between family processes and the broader social environment. Basic components of the research process will be introduced. Typically offered Fall Spring Summer.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HDFS 28000 - Diversity In Individual And Family Life

Credit Hours: 3.00. Students are introduced to aspects of individual and family life in diverse cultures, particularly racially and/or ethnically diverse families in the United States. The nature of relationships between dominant and minority cultures is considered. Implications of diversity for practice with diverse populations are emphasized throughout the course. Typically offered Fall Spring Summer.

HDFS 31100 - Child Development

Credit Hours: 3.00. This course addresses the study of development from infancy through childhood. It includes processes of physical, cognitive, language, social, and emotional development. Processes are discussed within the framework of historical and contemporary theories and current research. In addition, it covers topics related to methodologies used in the study of infant and child development. Finally, the conditions of children in different parts of the world are considered. Typically offered Fall Spring.

HDFS 34600 - Research Design And Program Evaluation

Credit Hours: 3.00. This course is an introduction to research methods as used in community programs for children and families including review and application of existing research literature, generating research questions, conducting program needs assessments, evaluating processes and outcomes of existing programs, designing and interpreting applied research studies, and understanding ethical responsibilities in the use and application of research. Instruction has been designed to provide the skills necessary to use existing research and generate new data to benefit programs. Typically offered Fall Spring.

Professional Education Courses

Maintain a Professional Education GPA of 3.00/4.00 with no grade lower than a "C-" and no incompletes for any single professional education course.

EDCI 27000 - Introduction To Educational Technology And Computing

Credit Hours: 3.00. Addresses fundamentals of educational technology, including the integration of instructional design, media, computers and related technologies within the classroom setting. Typically offered Fall Spring Summer.

EDCI 32500 - Literacy In The Primary Classroom

Credit Hours: 3.00. Students will study how children's oral language develops, how children learn to read and write in primary grade settings, and the teacher's role in this process. Students will learn how phonemic awareness, phonics, fluency, vocabulary and comprehension influence children's literacy development. Students will learn how to select appropriate instructional materials; employ teaching strategies to meet the cognitive and affective literacy needs of all children; and collect, interpret, and use data from various types of assessments to inform literacy teaching and learning processes. Typically offered Fall Spring Summer.

EDPS 32700 - Assessment Literacy

Credit Hours: 1.00 to 3.00. Evaluating the impact of instruction on student performance is one of the most important skills for an educator. Effective teachers ask themselves, "How do I know if students are truly learning? Are they meeting educational objectives in the content area?" Using well-chosen assessment approaches, teachers can address these questions. In this course, students will acquire assessment literacy: the ability to gather accurate information about student achievement, and use that information to make instructional decisions that will improve learning. Course activities will focus on assessment tasks relevant to P- 12 classroom settings. Typically offered Fall Spring.

EDPS 45900 - Assistive Technology

Credit Hours: 3.00. Use of technological applications in special education, including microcomputers, interactive video, auditory and visual enhancement, and other adaptive devices with individuals experiencing disabilities including learning disabilities, intellectual disabilities, sensory and physical disabilities. Typically offered Fall Spring.

EDPS 57300 - Medical And Physical Management Of Individuals With Multiple Disabilities

Credit Hours: 3.00. Medical and physical aspects of severe disabilities and implications for educational models of intervention and service delivery. Topics include nature of disorders/conditions, recent research findings, advanced methods for individual adaptations, and procedures for structural modification. Typically offered Fall Spring Summer.

HDFS 26000 - Young Children With Exceptional Needs

Credit Hours: 3.00. A broad overview of learner characteristics and service delivery models for young children (birth-8 years) who are at-risk or have identified disabilities. Students gain understanding of disabilities in young children, of laws relating to persons with disabilities, and roles of special and general educators in providing services to students with identified disabilities. Typically offered Spring.

EDPS 26500 - The Inclusive Classroom

Credit Hours: 3.00. Characteristics of students with special needs/talents; strategies for helping students learn and develop in general educational settings. Emphasis placed upon research evidence, case studies, problem-based learning, and development of a plan for an inclusive classroom. A field-based component is included. Typically offered Spring Summer Fall.

HDFS 31000 - Guidance In Early Childhood

Credit Hours: 3.00. This course presents a developmental, child-centered approach to the guidance and discipline of young children, including children with disabilities. Influential theories, relevant research, and effective guidance methods for the early childhood teachers and other professionals working with young children and families, including families from different cultural and economic backgrounds, are discussed. Admitted to Gate B. Typically offered Spring.

HDFS 40500 - Language, Literacy, And Social Studies In Preschool And Primary Grades

Credit Hours: 4.00. This course focuses on teaching language, literacy and social studies in preschool and primary grade classrooms. It covers the developmental foundations and curriculum applications of language, literacy and social studies teaching in pre-kindergarten and of social studies in primary grades and includes ways to plan, implement and evaluate developmentally appropriate instruction for children with and without disabilities and children who are learning English. A field experience in preschool or primary grade classrooms is included. Typically offered Fall.

HDFS 40600 - Mathematics In Preschool And Primary Grades

Credit Hours: 4.00. This course focuses on teaching mathematics in preschool and primary grade classrooms. It covers the developmental foundations and curriculum applications of mathematics teaching and includes ways to plan, implement and

evaluate developmentally appropriate mathematics instructions for children with and without disabilities and children who are learning English. Field-based experiences in preschool or primary grade classrooms are included. Typically offered Spring.

HDFS 40800 - Curriculum Applications Of Atypical Development

Credit Hours: 3.00. An introduction to early childhood special education and early intervention including its rationale, service delivery options and program models. Student will learn specialized teaching strategies including the use of structured prompting (e.g., mand-model), functional behavior assessment and positive behavior support. Development of Individualized Education Programs and Individualized Family Service Plans will be addressed. Strategies for and practice in meeting children's needs in inclusive and natural settings are addressed. For Early Childhood Education and Exceptional Needs majors only, Gate B retained. Typically offered Fall.

HDFS 40900 - Science In Preschool And Primary Grades

Credit Hours: 3.00. This course focuses on teaching science in preschool and primary grade classrooms. Developmental foundations and curriculum applications of science teaching including ways to plan, implement and evaluate developmentally appropriate science instruction for young children with and without disabilities and those who are learning English. Typically offered Spring.

HDFS 41200 - Music And Movement In Preschool And Primary Grades

Credit Hours: 2.00. This course focuses on music and movement in preschool and primary grade classrooms. It covers the developmental foundation and curriculum applications of music and movement activities and includes ways to plan, implement and evaluate developmentally appropriate music and movement instruction for children with and without disabilities and children who are learning English. Typically offered Spring.

HDFS 41500 - Approaches To Early Childhood Education

Credit Hours: 3.00. The historical and theoretical basis for early childhood education and early intervention is emphasized. Relations between theory and practice are examined and illustrated with model early childhood programs. Addresses cultural/developmental diversity, ethics, and standards in early childhood education and intervention. Typically offered Spring.

HDFS 42000 - Developmental Foundations Of Infant And Toddler Curriculum

Credit Hours: 3.00. Study of typical and atypical development in infants and toddlers as well as implication for practice. Focuses on infant toddler developmental assessment and designing and implementing learning activities in all developmental areas and enhancing parent/professional relationships. Includes a practicum experience with infants and toddlers. Typically offered Fall.

HDFS 45000 - Supervised Teaching In Inclusive Programs For Young Children

Credit Hours: 16.00. Observation of and teaching in inclusive programs for young children, under the supervision of the Department of Child Development and Family Studies faculty, the classroom teacher, and the special education teacher. Monthly seminars focus on issues pertinent to professional development. Sixteen weeks of full time teaching or the equivalent are required for 16 credits. Admittance to Gate C at least two semesters prior to enrollment. Admittance to Gate D. Permission of department required. Typically offered Fall Spring.

Required Courses in Other Departments (41-46 credits)

AD 20100 - Art For Elementary School Teachers

Credit Hours: 3.00. Art theory and experiences, curriculum theory, and materials preparatory for instruction of elementary school children. No undergraduate students may be enrolled in this course until they have been admitted to teacher education and a copy of this acceptance is on file. Typically offered Summer Fall Spring.

BIOL 20500 - Biology For Elementary School Teachers

Credit Hours: 3.00. Unifying concepts of biology taught with materials appropriate for future elementary school teachers. Does not satisfy requirements for College of Science Majors. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20600 - Biology For Elementary School Teachers

Credit Hours: 3.00. Continuation of BIOL 20500. Does not satisfy requirements for College of Science Majors. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 20000 - Fundamentals Of Chemistry

Credit Hours: 2.00. Integrative study of core concepts in chemistry that play a major role in governing the physical world. These core concepts are taught within the framework of important societal issues, such as atmospheric chemistry and nutrition. The pedagogy of this course is designed to provide reflective, interactive and hands-on-learning experiences that will assist elementary education majors to develop useful instructional strategies for their own classrooms. Required of students in elementary education program in the School of Education. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring.

EAPS 10200 - Earth Science For Elementary Teachers

Credit Hours: 3.00. Fundamental earth science concepts appropriate for future elementary teachers are presented. Typically offered Fall Spring.

PHYS 21500 - Physics For Elementary Education

Credit Hours: 2.00. The curriculum draws heavily on Project 2061 Benchmarks and NRC Science Education Standards for content and nature of science materials and focuses on middle school learning goals (especially those with strands at elementary level). Each learning goal was expanded to finer-grained target ideas creating more steps to make concepts more understandable and explicit. Activities were designed to enable students to develop deep conceptual understanding of each target area and the structure and sequence were guided by research on student learning. In this class social interactions are used to clarify ideas and to encourage peer teaching. The students' understandings are based on prior knowledge. The class is based on a constructivist framework where new understandings are scaffolded from partial to incomplete understandings, and those are refined over time. Typically offered Fall Spring.

ENGL 23000 - Great Narrative Works

Credit Hours: 3.00. Reading and discussion of great narratives from Homer's Odyssey to the present, considering works from a variety of cultures and time periods in order to develop an understanding of their ideas, structures, styles, and cultural values. Typically offered Fall Spring Summer.

ENGL 23800 - Introduction To Fiction

Credit Hours: 3.00. Reading and discussion of short stories and seven novels to promote awareness, understanding, and appreciation of the range, values, techniques, and meanings of modern fiction. Typically offered Fall Spring Summer.

LC 23900 - Women Writers In Translation

Credit Hours: 3.00. An examination of international female writers' literary creativity in the context of women's studies and feminist theory, as articulated in their specific cultural and geographical milieu. Course content will vary in terms of cultural focus. In English. Typically offered Fall Spring Summer.

SPAN 23500 - Spanish American Literature In Translation

Credit Hours: 3.00. Reading and discussion of selected masterpieces of Spanish American literature. The course context will change from semester to semester. Knowledge of Spanish not required. Typically offered Fall Spring Summer.

- 10100 Foreign Language - Credit Hours: 3.00 - (Total of 9 credits - must be from one language)
- 10200 - Credit Hours: 3.00
- 20100 - Credit Hours: 3.00

HIST 10400 - Introduction To The Modern World

Credit Hours: 3.00. Traces the expansion of Europe into the Americas, Africa, and Asia. The French Revolution, nationalism, and

the development of western European states from the era of the Reformation to the present are studied. Typically offered Fall Spring Summer.

HIST 15100 - American History To 1877

Credit Hours: 3.00. A study of the development of American political, economic, and social institutions from the early explorations and colonial settlements through Reconstruction. Typically offered Fall Spring Summer. CTL:ISH 1010 American History I

HIST 15200 - United States Since 1877

Credit Hours: 3.00. A study of the growth of the United States from 1877 to the present. The new industrialism, agrarian problems, depression, the New Deal, the two world wars, the cold war, and similar topics are analyzed. Typically offered Fall Spring Summer. CTL:ISH 1011 American History II

MUS 25000 - Music Appreciation

Credit Hours: 3.00. The traditions, forms, and styles of classical music. Other types of music may be examined as well. (Students may register through the Continuing Education Student Learning Center at the Tech Statewide locations via distance education.) Typically offered Fall Spring Summer. CTL:IFA 1330 Music Appreciation

MUS 36100 - Music Theory I

Credit Hours: 3.00. Course comprises instruction in melodic and harmonic processes in tonal music; development of analytic, listening and piano techniques with musical equipment. Music reading ability is required, verified through Placement Exam. Typically offered Fall Spring.

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT

30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

SOC 38200 - Introduction To Statistics In Sociology

Credit Hours: 3.00. Introduction to the basic techniques of statistical analysis applicable to sociological data. Elementary descriptive statistics and statistical inference. Introduction to multivariate analysis. Typically offered Fall Spring.

PSY 20100 - Introduction To Statistics In Psychology

Credit Hours: 3.00. An introduction to the development and application of statistical, quantitative, and measurement techniques pertinent to the psychological sciences. Fundamental concepts of numerical assignment, sampling theory, distribution functions, experimental design, inferential procedures, and statistical control. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

(IF STAT 11300 selected, fulfills Science, Technology & Society Core)

- [Oral Communication Core] - select from University list - Credit Hours: 3.00
- [Quantitative Reasoning Core] - select course numbered 15300 or above from University list (MA 15555 is recommended) - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list (IF STAT 11300 is selected for other requirement, this requirement is fulfilled) - Credit Hours: 0.00 - 3.00
- [Written Communication Core] - select from University list - Credit Hours: 3.00 - 4.00

Electives (1-6 credits)

Note

Minimum 2.80 grade point average required to qualify for admission to teacher education and student teaching.

Students must meet criteria for admission to the Teacher Education program. Complete information and requirements are listed at http://www.teach.purdue.edu/current_st/index.html.

At least 32 credits of coursework required at 300 level or higher to meet graduation requirements

120 semester credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

HDFS 10000 - Orientation To Current Issues In Human Development And Family Studies

Credit Hours: 1.00. Introduction to fields related to Human Development and Family studies, including majors and career paths. You will meet faculty, alumni, and professionals working in related areas. You will be matched with an advanced student mentor who will help you learn how to become successful as a HDFS student any beyond. Required of all students majoring in the department. Non-majors interested in learning more about HDFS majors are also welcome. Typically offered Fall.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

- CORE: Oral Communication - Credit Hours: 3.00

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

BIOL 20500 - Biology For Elementary School Teachers

Credit Hours: 3.00. Unifying concepts of biology taught with materials appropriate for future elementary school teachers. Does not satisfy requirements for College of Science Majors. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20600 - Biology For Elementary School Teachers

Credit Hours: 3.00. Continuation of BIOL 20500. Does not satisfy requirements for College of Science Majors. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

- Foreign Language - Credit Hours: 3.00

16 Credits

Spring 1st Year

HDFS 20100 - Introduction To Family Processes

Credit Hours: 3.00. An examination of the interpersonal processes that take place within family contexts. Emphasis is on family dynamics. Also considered are linkages between family processes and the broader social environment. Basic components of the research process will be introduced. Typically offered Fall Spring Summer.

- CORE: Written Communication - Credit Hours: 4.00

EDCI 27000 - Introduction To Educational Technology And Computing

Credit Hours: 3.00. Addresses fundamentals of educational technology, including the integration of instructional design, media, computers and related technologies within the classroom setting. Typically offered Fall Spring Summer.

HIST 10400 - Introduction To The Modern World

Credit Hours: 3.00. Traces the expansion of Europe into the Americas, Africa, and Asia. The French Revolution, nationalism, and the development of western European states from the era of the Reformation to the present are studied. Typically offered Fall Spring Summer.

- Foreign Language - Credit Hours: 3.00
- Elective - Credit Hours: 0.00 - 1.00

16 Credits

Fall 2nd Year

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

HDFS 28000 - Diversity In Individual And Family Life

Credit Hours: 3.00. Students are introduced to aspects of individual and family life in diverse cultures, particularly racially and/or ethnically diverse families in the United States. The nature of relationships between dominant and minority cultures is

considered. Implications of diversity for practice with diverse populations are emphasized throughout the course. Typically offered Fall Spring Summer.

HDFS 31100 - Child Development

Credit Hours: 3.00. This course addresses the study of development from infancy through childhood. It includes processes of physical, cognitive, language, social, and emotional development. Processes are discussed within the framework of historical and contemporary theories and current research. In addition, it covers topics related to methodologies used in the study of infant and child development. Finally, the conditions of children in different parts of the world are considered. Typically offered Fall Spring.

CHM 20000 - Fundamentals Of Chemistry

Credit Hours: 2.00. Integrative study of core concepts in chemistry that play a major role in governing the physical world. These core concepts are taught within the framework of important societal issues, such as atmospheric chemistry and nutrition. The pedagogy of this course is designed to provide reflective, interactive and hands-on-learning experiences that will assist elementary education majors to develop useful instructional strategies for their own classrooms. Required of students in elementary education program in the School of Education. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring.

EAPS 10200 - Earth Science For Elementary Teachers

Credit Hours: 3.00. Fundamental earth science concepts appropriate for future elementary teachers are presented. Typically offered Fall Spring.

PHYS 21500 - Physics For Elementary Education

Credit Hours: 2.00. The curriculum draws heavily on Project 2061 Benchmarks and NRC Science Education Standards for content and nature of science materials and focuses on middle school learning goals (especially those with strands at elementary level). Each learning goal was expanded to finer-grained target ideas creating more steps to make concepts more understandable and explicit. Activities were designed to enable students to develop deep conceptual understanding of each target area and the structure and sequence were guided by research on student learning. In this class social interactions are used to clarify ideas and to encourage peer teaching. The students' understandings are based on prior knowledge. The class is based on a constructivist framework where new understandings are scaffolded from partial to incomplete understandings, and those are refined over time. Typically offered Fall Spring.

- Foreign Language - Credit Hours: 3.00
- Elective - Credit Hours: 0.00 - 1.00

15 Credits

Spring 2nd Year

EDPS 26500 - The Inclusive Classroom

Credit Hours: 3.00. Characteristics of students with special needs/talents; strategies for helping students learn and develop in general educational settings. Emphasis placed upon research evidence, case studies, problem-based learning, and development of a plan for an inclusive classroom. A field-based component is included. Typically offered Spring Summer Fall.

HDFS 26000 - Young Children With Exceptional Needs

Credit Hours: 3.00. A broad overview of learner characteristics and service delivery models for young children (birth-8 years) who are at-risk or have identified disabilities. Students gain understanding of disabilities in young children, of laws relating to persons with disabilities, and roles of special and general educators in providing services to students with identified disabilities. Typically offered Spring.

HDFS 31000 - Guidance In Early Childhood

Credit Hours: 3.00. This course presents a developmental, child-centered approach to the guidance and discipline of young children, including children with disabilities. Influential theories, relevant research, and effective guidance methods for the early childhood teachers and other professionals working with young children and families, including families from different cultural and economic backgrounds, are discussed. Admitted to Gate B. Typically offered Spring.

HDFS 41200 - Music And Movement In Preschool And Primary Grades

Credit Hours: 2.00. This course focuses on music and movement in preschool and primary grade classrooms. It covers the developmental foundation and curriculum applications of music and movement activities and includes ways to plan, implement and evaluate developmentally appropriate music and movement instruction for children with and without disabilities and children who are learning English. Typically offered Spring.

HDFS 34600 - Research Design And Program Evaluation

Credit Hours: 3.00. This course is an introduction to research methods as used in community programs for children and families including review and application of existing research literature, generating research questions, conducting program needs assessments, evaluating processes and outcomes of existing programs, designing and interpreting applied research studies, and understanding ethical responsibilities in the use and application of research. Instruction has been designed to provide the skills necessary to use existing research and generate new data to benefit programs. Typically offered Fall Spring.

EDCI 32500 - Literacy In The Primary Classroom

Credit Hours: 3.00. Students will study how children's oral language develops, how children learn to read and write in primary

grade settings, and the teacher's role in this process. Students will learn how phonemic awareness, phonics, fluency, vocabulary and comprehension influence children's literacy development. Students will learn how to select appropriate instructional materials; employ teaching strategies to meet the cognitive and affective literacy needs of all children; and collect, interpret, and use data from various types of assessments to inform literacy teaching and learning processes. Typically offered Fall Spring Summer.

EDPS 32700 - Assessment Literacy

Credit Hours: 1.00 to 3.00. Evaluating the impact of instruction on student performance is one of the most important skills for an educator. Effective teachers ask themselves, "How do I know if students are truly learning? Are they meeting educational objectives in the content area?" Using well-chosen assessment approaches, teachers can address these questions. In this course, students will acquire assessment literacy: the ability to gather accurate information about student achievement, and use that information to make instructional decisions that will improve learning. Course activities will focus on assessment tasks relevant to P- 12 classroom settings. Typically offered Fall Spring.

15 Credits

Fall 3rd Year

Professional Semester 2

HDFS 40500 - Language, Literacy, And Social Studies In Preschool And Primary Grades

Credit Hours: 4.00. This course focuses on teaching language, literacy and social studies in preschool and primary grade classrooms. It covers the developmental foundations and curriculum applications of language, literacy and social studies teaching in pre-kindergarten and of social studies in primary grades and includes ways to plan, implement and evaluate developmentally appropriate instruction for children with and without disabilities and children who are learning English. A field experience in preschool or primary grade classrooms is included. Typically offered Fall.

HDFS 40800 - Curriculum Applications Of Atypical Development

Credit Hours: 3.00. An introduction to early childhood special education and early intervention including its rationale, service delivery options and program models. Student will learn specialized teaching strategies including the use of structured prompting (e.g., mand-model), functional behavior assessment and positive behavior support. Development of Individualized Education Programs and Individualized Family Service Plans will be addressed. Strategies for and practice in meeting children's needs in inclusive and natural settings are addressed. For Early Childhood Education and Exceptional Needs majors only, Gate B retained. Typically offered Fall.

HDFS 42000 - Developmental Foundations Of Infant And Toddler Curriculum

Credit Hours: 3.00. Study of typical and atypical development in infants and toddlers as well as implication for practice. Focuses

on infant toddler developmental assessment and designing and implementing learning activities in all developmental areas and enhancing parent/professional relationships. Includes a practicum experience with infants and toddlers. Typically offered Fall.

EDPS 57300 - Medical And Physical Management Of Individuals With Multiple Disabilities

Credit Hours: 3.00. Medical and physical aspects of severe disabilities and implications for educational models of intervention and service delivery. Topics include nature of disorders/conditions, recent research findings, advanced methods for individual adaptations, and procedures for structural modification. Typically offered Fall Spring Summer.

13 Credits

Spring 3rd Year

Professional Semester 3

HDFS 40600 - Mathematics In Preschool And Primary Grades

Credit Hours: 4.00. This course focuses on teaching mathematics in preschool and primary grade classrooms. It covers the developmental foundations and curriculum applications of mathematics teaching and includes ways to plan, implement and evaluate developmentally appropriate mathematics instructions for children with and without disabilities and children who are learning English. Field-based experiences in preschool or primary grade classrooms are included. Typically offered Spring.

HDFS 41500 - Approaches To Early Childhood Education

Credit Hours: 3.00. The historical and theoretical basis for early childhood education and early intervention is emphasized. Relations between theory and practice are examined and illustrated with model early childhood programs. Addresses cultural/developmental diversity, ethics, and standards in early childhood education and intervention. Typically offered Spring.

HDFS 40900 - Science In Preschool And Primary Grades

Credit Hours: 3.00. This course focuses on teaching science in preschool and primary grade classrooms. Developmental foundations and curriculum applications of science teaching including ways to plan, implement and evaluate developmentally appropriate science instruction for young children with and without disabilities and those who are learning English. Typically offered Spring.

AD 20100 - Art For Elementary School Teachers

Credit Hours: 3.00. Art theory and experiences, curriculum theory, and materials preparatory for instruction of elementary school children. No undergraduate students may be enrolled in this course until they have been admitted to teacher education and a copy of this acceptance is on file. Typically offered Summer Fall Spring.

EDPS 45900 - Assistive Technology

Credit Hours: 3.00. Use of technological applications in special education, including microcomputers, interactive video, auditory and visual enhancement, and other adaptive devices with individuals experiencing disabilities including learning disabilities, intellectual disabilities, sensory and physical disabilities. Typically offered Fall Spring.

16 Credits

Fall 4th Year

ENGL 23800 - Introduction To Fiction

Credit Hours: 3.00. Reading and discussion of short stories and seven novels to promote awareness, understanding, and appreciation of the range, values, techniques, and meanings of modern fiction. Typically offered Fall Spring Summer.

ENGL 23000 - Great Narrative Works

Credit Hours: 3.00. Reading and discussion of great narratives from Homer's Odyssey to the present, considering works from a variety of cultures and time periods in order to develop an understanding of their ideas, structures, styles, and cultural values. Typically offered Fall Spring Summer.

LC 23900 - Women Writers In Translation

Credit Hours: 3.00. An examination of international female writers' literary creativity in the context of women's studies and feminist theory, as articulated in their specific cultural and geographical milieu. Course content will vary in terms of cultural focus. In English. Typically offered Fall Spring Summer.

SPAN 23500 - Spanish American Literature In Translation

Credit Hours: 3.00. Reading and discussion of selected masterpieces of Spanish American literature. The course context will change from semester to semester. Knowledge of Spanish not required. Typically offered Fall Spring Summer.

HIST 15100 - American History To 1877

Credit Hours: 3.00. A study of the development of American political, economic, and social institutions from the early

explorations and colonial settlements through Reconstruction. Typically offered Fall Spring Summer. CTL:ISH 1010 American History I

HIST 15200 - United States Since 1877

Credit Hours: 3.00. A study of the growth of the United States from 1877 to the present. The new industrialism, agrarian problems, depression, the New Deal, the two world wars, the cold war, and similar topics are analyzed. Typically offered Fall Spring Summer. CTL:ISH 1011 American History II

MUS 25000 - Music Appreciation

Credit Hours: 3.00. The traditions, forms, and styles of classical music. Other types of music may be examined as well. (Students may register through the Continuing Education Student Learning Center at the Tech Statewide locations via distance education.) Typically offered Fall Spring Summer. CTL:IFA 1330 Music Appreciation

MUS 36100 - Music Theory I

Credit Hours: 3.00. Course comprises instruction in melodic and harmonic processes in tonal music; development of analytic, listening and piano techniques with musical equipment. Music reading ability is required, verified through Placement Exam. Typically offered Fall Spring.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 1.00

13 Credits

Spring 4th Year

Professional Semester 4

HDFS 45000 - Supervised Teaching In Inclusive Programs For Young Children

Credit Hours: 16.00. Observation of and teaching in inclusive programs for young children, under the supervision of the Department of Child Development and Family Studies faculty, the classroom teacher, and the special education teacher. Monthly seminars focus on issues pertinent to professional development. Sixteen weeks of full time teaching or the equivalent are required for 16 credits. Admittance to Gate C at least two semesters prior to enrollment. Admittance to Gate D. Permission of department required. Typically offered Fall Spring.

16 Credits

120 Total Credits

Requirements

Professional Education Semesters are sequential and must be completed in order

Teacher Education Requirements:

Overall GPA 2.8

Content Education Coursework: 2.8

Professional Education Coursework: 3.0 (no grade lower than a C)

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Family and Consumer Sciences Education, BS

About the Program

Making a difference in the lives of young people is what Family and Consumer Sciences (FCS) Education is all about. As a family and consumer sciences educator, you can make a lifelong impact. You can help students develop the ability to become independent, to assume family and community roles, and to succeed in the workplace. Students in FCS benefit from extensive field experiences in schools and community agencies.

Purdue's FCS Education graduates are in high demand and often receive several job offers. Because the program is aligned with national standards, you will not only have met requirements for an Indiana teacher's license, but you'll also be prepared to teach anywhere in the United States. FCS Education is an interdisciplinary program between the College of Health and Human Sciences and the College of Education.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Family and Consumer Sciences Education include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HDFS-BS

FCSE

120-127 credits

Major Requirements - Family & Consumer Sciences Content (99-101 credits)

Maintain a minimum Content GPA of 2.50/4.00.

AD 12500 - Introduction To Interior Design

Credit Hours: 3.00. Introductory survey of interior spaces and their impact upon the physical, social, psychological, and aesthetic needs of people. Critical evaluation of concepts in the interior design profession and related fields will be emphasized. Typically offered Fall.

CSR 12000 - Introduction To Apparel Industry

Credit Hours: 3.00. Introductory course that explores all facets of the apparel industry from its historical beginnings to concept of design and product development, to marketing, to manufacturing, to distribution, to retailing. Throughout the course, the student will learn about the career opportunities within the apparel industry. Typically offered Fall.

CSR 22300 - Apparel Assembly

Credit Hours: 3.00. Experimentation of basic professional techniques for apparel assembly utilizing both domestic and industrial equipment. Course includes apparel construction, fitting, and finishing of a variety of garments. Students gain insight into the relationship between creative design and quality of a finished product. Typically offered Spring.

CSR 21500 - Textiles

Credit Hours: 2.00. A basic textiles course dealing with the properties of textile fibers and fabrics and their impact on product performance and consumer satisfaction. Emphasis on retail, apparel, and interior design applications. Typically offered Spring.

CSR 21501 - Textiles Laboratory

Credit Hours: 1.00. Laboratory work to accompany CSR 21500. Typically offered Spring.

CSR 34200 - Personal Finance

Credit Hours: 3.00. The class covers a comprehensive discussion of investments, consumer credit, insurance and retirement issues. The goal is to show how these components are interconnected in order to create a complete picture of financial health of an individual. Typically offered Spring Summer Fall. CTL:IPO 1811 Personal Finance

ECON 21900 - Economics For Future Elementary Teachers

Credit Hours: 3.00. A principles of economics course designed for future elementary and social studies teachers. The purpose of this course is to: 1) introduce the future teacher to basic economic concepts required by the Indiana Academic Standards for Social Studies, K-6, 2) learn methods for teaching these concepts in the K-6 curriculum, and 3) develop a catalog of curriculum materials appropriate for teaching economics in grades K-6. No credit for management students. Typically offered Fall Spring.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

HDFS 10000 - Orientation To Current Issues In Human Development And Family Studies

Credit Hours: 1.00. Introduction to fields related to Human Development and Family studies, including majors and career paths. You will meet faculty, alumni, and professionals working in related areas. You will be matched with an advanced student mentor who will help you learn how to become successful as a HDFS student any beyond. Required of all students majoring in the department. Non-majors interested in learning more about HDFS majors are also welcome. Typically offered Fall.

HDFS 20100 - Introduction To Family Processes

Credit Hours: 3.00. An examination of the interpersonal processes that take place within family contexts. Emphasis is on family dynamics. Also considered are linkages between family processes and the broader social environment. Basic components of the research process will be introduced. Typically offered Fall Spring Summer.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HDFS 21200 - Child Observation Practicum

Credit Hours: 2.00. Focuses on the development of observation skills and the understanding of young childrens behavior in group settings. Typically offered Fall.

HDFS 33000 - Sexuality And Family Life

Credit Hours: 3.00. Provides the student with a basic knowledge of human sexuality as it pertains to individuals, couples and families. The course is designed to be helpful to students who will become family life educators as well as to be helpful to students as individuals, spouses, and parents. Typically offered Fall Spring.

HDFS 33200 - Stress And Coping In Contemporary Families

Credit Hours: 3.00. Examines theoretical perspectives related to family stress and resilience in multicultural and diverse family settings, and connects these perspectives to empirical work on family dynamics, coping, and dysfunction across the lifespan. Topics such as economic stress and poverty, immigrant families, single-parent families, homeless families, adoption, military families, maltreatment, and families coping with illness are explored. The class focuses on environmental, cultural, as well as biological contributions to both risk and resilience processes in individuals and families. Typically offered Fall Spring

HDFS 32500 - Health And Health Care For Children And Families

Credit Hours: 3.00. This course discusses leading causes of child health problems as well as examines the child and family reactions and adjustment to illness and disability. A developmental perspective on coping with health problems from early childhood through adolescence is presented. An overview on global child health disparities is also addressed. Typically offered Fall Spring.

HK 20000 - Healthy Lifestyles

Credit Hours: 3.00. Students are provided an opportunity to assess personal behavior patterns related to preventive health services, health protection activities concerning environmental issues, and promotion of a healthful lifestyle. Personal strategies for adopting and maintaining potential health-enhancing behaviors are explored. Typically offered Fall Spring Summer.

HTM 17300 - Introduction To Tourism Management

Credit Hours: 3.00. This is an introduction to tourism management using a system approach that integrates a variety of hospitality

and travel organizations and businesses. It focuses on the understanding of tourism from the perspectives of travelers and destinations, while identifying tourism's economic, socio-cultural, and environmental impacts on communities. Typically offered Fall Spring.

HTM 18100 - Lodging Management

Credit Hours: 3.00. Organization, management and operating procedures of lodging facilities. Guest-employee interactions will be analyzed along with current trends and cutting edge topics in the lodging industry. A history of the lodging industry will be discussed. Typically offered Fall Spring.

HTM 19100 - Sanitation And Health In Foodservice, Lodging, And Tourism

Credit Hours: 3.00. This course introduces students to the foodservice component of the Hospitality and Tourism industry and explores food safety and other health related issues. Application of sanitation principles in restaurants, hospitals, schools, hotels, cruise ships, airlines, and international travel are covered. Students must pass a National Sanitation Certification Examination to receive credit. Typically offered Fall Spring.

HTM 29101 - Quantity Food Production And Service Laboratory

Credit Hours: 2.00. Basic knowledge of foodservice operations. Students learn and develop food production and service skills in the Boiler Bristo and the John Purdue Room. Students are exposed to quantity cooking methods, the use and care of equipment, and service techniques as they rotate through various positions commonly found in foodservice operations. All aspects of the dining experience are experienced by students. National Sanitation Certification needed. Typically offered Fall Spring.

HTM 29102 - Introduction To Foodservice Management

Credit Hours: 2.00. An introduction to food preparation methods and service techniques in quantity food settings. Students become familiar with ingredients and culinary terminology, and learn to read, write and evaluate menus. Recipe conversion, inventory and costing skills are developed. Production methods and product flow are examined. Front-of-the-house service techniques as well as front-and-back-of-the-house interactions will be studied. Typically offered Fall Spring.

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases;

oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

NUTR 20200 - Principles Of Food Preparation And Nutrition

Credit Hours: 4.00. Chemical, physical, microbiological, and nutritional principles of food preparation. Functions and sources of nutrients, their relationship to a healthy lifestyle and incorporating the benefits into marketing of foodservice. Typically offered Fall Spring.

NUTR 20201 - Experience In Food Preparation

Credit Hours: 1.00. Application of chemical, physical, microbiological, and nutritional principles in food preparation. Typically offered Fall Spring.

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

Content-Area Selectives - select 6 credits - course content must be related to family & consumer sciences

(●if doing concentration, must take STAT 11300 and it also fulfills Sci, Tech & Society Core)

(●if doing concentration, must take HDFS 34300, HDFS 34800, or HDFS 34100)

Professional Education

Maintain a Professional Education GPA of 3.00/4.00 with no grade lower than a "C-" and no incompletes for any single professional education course.

EDCI 27000 - Introduction To Educational Technology And Computing

Credit Hours: 3.00. Addresses fundamentals of educational technology, including the integration of instructional design, media, computers and related technologies within the classroom setting. Typically offered Fall Spring Summer.

EDPS 32700 - Assessment Literacy

Credit Hours: 1.00 to 3.00. Evaluating the impact of instruction on student performance is one of the most important skills for an educator. Effective teachers ask themselves, "How do I know if students are truly learning? Are they meeting educational objectives in the content area?" Using well-chosen assessment approaches, teachers can address these questions. In this course, students will acquire assessment literacy: the ability to gather accurate information about student achievement, and use that information to make instructional decisions that will improve learning. Course activities will focus on assessment tasks relevant to P- 12 classroom settings. Typically offered Fall Spring.

EDST 20010 - Educational Policies And Laws

Credit Hours: 1.00 to 3.00. The interactive course will provide an understanding of the history of schooling in the United States. A special emphasis will be placed on reviewing historical and contemporary educational policies and educational laws as each subject is critical to understanding social, historical, and cultural issues in the United States. Focus will also be on contemporary applications of historical ideas in the classroom and in school systems. Typically offered Fall Spring.

EDPS 49100 - Topics And Issues In Education

Credit Hours: 1.00 to 3.00. Provides student with opportunity to strengthen preparation through study of selected educational topics and issues based upon individual needs and interests. One topic is considered in each enrollment. Typically offered Fall Spring Summer.

Block I

EDCI 20500 - Exploring Teaching As A Career

Credit Hours: 3.00. Students will become familiar with the work of teachers and begin to develop their educational philosophies through examining what it means to teach and to learn and the nature and purpose of schools. Students will critically evaluate teaching as their chosen profession. This course includes a required weekly field-based experience in an elementary, middle, or high school classroom. Typically offered Fall Spring.

EDCI 28500 - Multiculturalism And Education

Credit Hours: 3.00. This course integrates an understanding of multiculturalism with principles of democratic education. Historical, sociological, cultural, political, philosophical, and pedagogical foundations of multiculturalism are explored and related to issues of pedagogy in a pluralistic society. This course is taken concurrently with EDCI 20500, which includes a school-based Theory into Practice field experience. Some discussion topics and assignments will be based on that field experience. It is highly recommended that EDCI 27000 be taken with or before taking this course. Typically offered Fall Spring Summer.

Block II

EDPS 23500 - Learning And Motivation

Credit Hours: 3.00. Introduction to concepts of learning and motivation in educational contexts (i.e., Educational Psychology). Influence of development, culture, and individual differences on learning and motivation. Uses of assessment and technology in promoting learning and motivation. A field-based experiential component is included. Typically offered Fall Spring Summer.

EDPS 26500 - The Inclusive Classroom

Credit Hours: 3.00. Characteristics of students with special needs/talents; strategies for helping students learn and develop in general educational settings. Emphasis placed upon research evidence, case studies, problem-based learning, and development of a plan for an inclusive classroom. A field-based component is included. Typically offered Spring Summer Fall.

Family & Consumer Sciences Education

EDCI 25000 - Professional Development In Family And Consumer Sciences Education

Credit Hours: 1.00 or 2.00. This course focuses on students' professional development as family and consumer sciences educators. Characteristics and relationships among middle and high school family and consumer sciences standards, resources, and learning experiences; the Purdue Family and Consumer Sciences Education program; and expectations for Indiana FCS teacher-licensure are emphasized. Includes participation in professional organizations and meetings. Typically offered Fall.

- EDCI 25000 - Professional Development In Family And Consumer Sciences Education

EDCI 35000 - Community Issues & Applications For Educators

Credit Hours: 2.00 or 3.00. This course is an examination of diverse individual, family, and community characteristics and issues, and potential impacts on teaching and learning processes. Includes service learning with human service agencies and personnel in the school and community. As part of this course, students complete certification to meet the Indiana Department of Education suicide prevention training requirement for teacher licensure. Typically offered Fall.

(●if doing concentration, must take HDFS 33100 instead of EDCI 35000)

EDCI 35600 - Career Education In Family And Consumer Sciences

Credit Hours: 3.00. Examination of middle and high school career education accomplished through family and consumer sciences, including (1) life and career exploration and planning; (2) analysis of career paths and opportunities in family and consumer sciences; and (3) career preparation through laboratory and cooperative education programs. Historical and contemporary foundations for career education in family and consumer sciences is also addressed. Includes observations and

interactions with students and teachers in career-education programs and participation in professional meetings. Typically offered Fall.

EDCI 36000 - Curriculum And Instruction In Family And Consumer Sciences: Middle School

Credit Hours: 3.00. Instructional program development for family and consumer sciences. Developmental needs and issues of early adolescents; study of adolescent literacy; and curriculum integration of language arts, math, and other content areas are emphasized. Development of a comprehensive unit of instruction that incorporates standard-based curriculum, assessment, and instruction for family and consumer sciences is a major component of the course. Includes observations and interactions with family and consumer sciences teachers and students and participation in professional meetings. Typically offered Spring.

EDCI 44400 - Methods for Teaching Family and Consumer Sciences

Credit Hours: 4.00. The culminating on-campus teacher-education course for the Purdue University Family and Consumer Sciences program. The course builds and consolidates teacher-candidates' knowledge and skills for teaching family and consumer sciences. Emphasis placed on standards-based instructional planning and materials; instructional strategies, including laboratories, assessment of student learning, and classroom management. Course includes field experiences. Program content requirements should be completed previous to or concurrent with this course. Typically offered Fall.

EDCI 49800 - Supervised Teaching

Credit Hours: 8.00 to 16.00. Teaching full time in a school classroom under the supervision of the teacher in charge of the class and a University supervisor. Completion of education methods courses and other Gate requirements for the major area and admittance to teacher education required. Typically offered Fall Spring Summer.

- EDCI 49800 - Supervised Teaching - Credit Hours: 8.00
- Must complete 4,000 clock hours of successful employment in family and consumer sciences or 1,500 clock hours of supervised work in family and consumer sciences under an approved teacher education program or an equivalent combination - Credit Hours: 0.00

Required Courses in Other Departments (17-26 credits)

BIOL 14600 - Introduction To Biology

Credit Hours: 3.00. This course is designed to introduce non-majors to basic concepts in biology including hypothesis testing, biomolecules, cell structure and function, molecular biology and evolution. Emphasis will be placed on how these topics relate to human health and disease and to the health of the environment. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20100 - Human Anatomy And Physiology

Credit Hours: 2.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning

experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

- [Oral Communication Core] - select from University list (EDPS 31500 recommended, which will also fulfill 3 credits of Content-Area Selective) - Credit Hours: 3.00
- [Quantitative Reasoning] - select course numbered 15300 or above from University list (MA 15555 is recommended) - Credit Hours: 3.00
- [Science, Technology & Society] - select from University list (See list for recommendations, which will also fulfill 3 credits of Content Area Selective) •if doing concentration, fulfilled by STAT 11300 - Credit Hours: 0.00 - 3.00

Electives (0-1 credits)

Note

120-127 semester credits required for Bachelor of Science degree (120-124 if doing Human Services Concentration)

At least 32 credits of coursework required at 300 level or higher to meet graduation requirements.

Minimum 2.80 grade point average required to qualify for admission to teacher education and student teaching. Students must meet criteria for admission to the Teacher Education program. Complete information and requirements are listed at http://www.teach.purdue.edu/current_st/index.html.

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Content-Area Selectives List - these courses are also recommended to fulfill the Science, Technology & Society Core

COM 25100 - Communication, Information, And Society

Credit Hours: 3.00. This course provides an introduction to information and communication technologies, including media and computer-related technologies. Basic information and technical literacy skills are developed, while discussing fundamental concepts of mediated communication in 21st century contexts. Typically offered Fall Spring Summer.

EAPS 12000 - Introduction To Geography

Credit Hours: 3.00. Introduction to the major themes of modern geography, designed to enhance your spatial thinking skills, geographic literacy, and to help you understand the relevance of geographic concepts and how they relate to our changing world. This course will expand your awareness of global issues and provide you with tools to understand how the world around you changes at local, regional, and global scales. Typically offered Fall Spring Summer.

EPCS 10100 - First Year Participation In EPICS

Credit Hours: 1.00. Together, Engineering Projects in Community Service (EPICS) courses create a vertical project track under which students work in multidisciplinary teams on long-term engineering-based design projects. Projects of at least one-year in duration are intended to solve real problems that are defined in consultation with "customers" from not-for-profit community and education organizations. EPCS courses are open to students from all disciplines; each student contributes expertise in his/her academic discipline. Each team consists of a mix of first year, sophomores, juniors, and seniors. Students are encouraged to participate in an EPICS project team for two or more semesters. First year students participating in EPCS 10100 gain insight into the specific project, and more generally, into the design and development process. They attend planning and reporting meetings with the customer and are expected attend all team meetings. Under the mentorship of the team's sophomores, juniors and seniors they perform and report upon tasks consistent with their level of discipline expertise. May be repeated for credit. Typically offered Fall Spring.

EPCS 10200 - First Year Participation In EPICS

Credit Hours: 2.00. Continuation of EPCS courses (see EPCS 10100). Participants in EPCS 10200 gain insight into the specific project, and more generally, into the design and development process. They attend planning and reporting meetings with the customer and are expected to attend all team meetings. Working with team's sophomores, juniors and seniors they perform and report upon tasks consistent with their level of discipline expertise. EPCS 10200 is offered for two credits and is intended for students who have exhibited significant achievement in EPCS 10100 and desire the level of responsibility that is appropriate for two credits. May be repeated for credit. Permission of department required. Typically offered Fall Spring.

EPCS 20100 - Sophomore Participation In EPICS

Credit Hours: 1.00. Continuation of EPCS courses (see EPCS 10100). Sophomores participating in EPCS 20100 gain insight into the specific project, and, more generally, into the design and development process. They attend planning and reporting meetings with the customer and are expected attend all team meetings. Under the mentorship of the team's juniors and seniors they perform and report upon tasks consistent with their level of discipline expertise. EPCS 20100 is offered for 1 credit. Typically offered Summer Fall Spring.

EPCS 20200 - Sophomore Participation In EPICS

Credit Hours: 2.00. Continuation of EPCS courses (see EPCS 10100). Sophomores participating in EPCS 20100 gain insight into the specific project, and, more generally, into the design and development process. They attend planning and reporting meetings with the customer and are expected attend all team meetings. Under the mentorship of the team's juniors and seniors they perform and report upon tasks consistent with their level of discipline expertise. EPCS 20200 is offered for 2 credits. Permission of instructor required. Typically offered Summer Fall Spring.

FNR 10300 - Introduction To Environmental Conservation

Credit Hours: 3.00. Introduction to ecological principles, history of conservation, natural resource management, human impacts on the environment, and environmental ethics. For all students interested in an introductory natural resource or environmental science elective. Typically offered Fall Spring.

FS 16100 - Science Of Food

Credit Hours: 3.00. Chemical and physical properties of foods; issues pertaining to safety, food-diet-health relationship; government regulations pertaining to food safety, quality and additives; preservation techniques and transformation of agricultural commodities to food products; Food facts, myths, and practices that are important for making intelligent food decisions. Course may also be offered for dual credit with cooperating Indiana high schools upon documented approval by the Department of Food Science. Typically offered Fall.

IT 22600 - Biotechnology Laboratory I

Credit Hours: 2.00. Focuses on nucleic acid manipulation. Modules include, making a eukaryotic library, identifying clones, sub-cloning into a bacterial expression vector and verification of the clone's identity by restriction analysis and DNA sequencing. Basic laboratory techniques (solution making, buffer preparation, good safety techniques), sterile technique and compliance procedures. Typically offered Summer Fall Spring.

PHIL 27000 - Biomedical Ethics

Credit Hours: 3.00. An examination of the moral problems raised by developments in medicine and the biomedical sciences. Topics include abortion, reproductive technologies, euthanasia and physician-assisted suicide, experiments involving human subjects, and health care delivery. Typically offered Fall Spring.

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

TECH 12000 - Design Thinking In Technology

Credit Hours: 3.00. Student will engage in critical analysis of real-world problems and global challenges. They will demonstrate the ability to recognize opportunity and to take initiative in developing solutions applying the principles of human centered design. Students will be able to communicate effectively and to work well on teams. Problems and solutions will be examined from societal, cultural, and ethical perspectives. Typically offered Fall Spring Summer.

● OPTIONAL Human Services Concentration Requirements (XHSB)

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

HDFS 32500 - Health And Health Care For Children And Families

Credit Hours: 3.00. This course discusses leading causes of child health problems as well as examines the child and family reactions and adjustment to illness and disability. A developmental perspective on coping with health problems from early childhood through adolescence is presented. An overview on global child health disparities is also addressed. Typically offered Fall Spring.

HDFS 34300 - Assessment And Case Management

Credit Hours: 3.00. This course is an introduction to case management as a service delivery approach for helping individuals and families in need. This course provides opportunities to practice basic helping and case management skills such as building rapport, assessing client needs, developing intervention plans, professional ethics, and professional writing. Typically offered Fall Spring.

HDFS 34800 - Administration Of Social Service Not-For-Profit Organizations

Credit Hours: 3.00. This course introduces students to aspects of not-for-profit management identified as keys by leaders in existing agencies. Students will prepare themselves for specifically establishing, building, working in and leading not-for-profit organizations. Typically offered Fall.

HDFS 34100 - Working With Parents

Credit Hours: 3.00. This course focuses on developing and maintaining effective relationships between parents and professionals working with children, within the context of family-centered practices. Issues related to cultural, linguistic, economic, and developmental differences that affect relations between families and professionals are examined. Typically offered Spring Fall.
select one to meet 3 cr of Content-Area Selective

HDFS 33100 - Skills For Helping Professionals In Individual, Family And Group Settings

Credit Hours: 3.00. This course is an introduction to skills commonly used in helping professions, including relationship-building

skills, beginning interviewing skills, and group process skills. Attention is paid to cultural competence and professional ethics. This course includes a weekly "lab" experience involving practice of the helping skills, as well as a service-learning project in which helping skills are used in a community setting. Typically offered Fall Spring.

Program Requirements

Fall 1st Year

HDFS 10000 - Orientation To Current Issues In Human Development And Family Studies

Credit Hours: 1.00. Introduction to fields related to Human Development and Family studies, including majors and career paths. You will meet faculty, alumni, and professionals working in related areas. You will be matched with an advanced student mentor who will help you learn how to become successful as a HDFS student any beyond. Required of all students majoring in the department. Non-majors interested in learning more about HDFS majors are also welcome. Typically offered Fall.

HDFS 20100 - Introduction To Family Processes

Credit Hours: 3.00. An examination of the interpersonal processes that take place within family contexts. Emphasis is on family dynamics. Also considered are linkages between family processes and the broader social environment. Basic components of the research process will be introduced. Typically offered Fall Spring Summer.

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

EDCI 27000 - Introduction To Educational Technology And Computing

Credit Hours: 3.00. Addresses fundamentals of educational technology, including the integration of instructional design, media, computers and related technologies within the classroom setting. Typically offered Fall Spring Summer.

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

16 Credits

Spring 2nd Year

EDCI 25000 - Professional Development In Family And Consumer Sciences Education

Credit Hours: 1.00 or 2.00. This course focuses on students' professional development as family and consumer sciences educators. Characteristics and relationships among middle and high school family and consumer sciences standards, resources, and learning experiences; the Purdue Family and Consumer Sciences Education program; and expectations for Indiana FCS teacher-licensure are emphasized. Includes participation in professional organizations and meetings. Typically offered Fall.

EDCI 20500 - Exploring Teaching As A Career

Credit Hours: 3.00. Students will become familiar with the work of teachers and begin to develop their educational philosophies through examining what it means to teach and to learn and the nature and purpose of schools. Students will critically evaluate teaching as their chosen profession. This course includes a required weekly field-based experience in an elementary, middle, or high school classroom. Typically offered Fall Spring.

EDCI 28500 - Multiculturalism And Education

Credit Hours: 3.00. This course integrates an understanding of multiculturalism with principles of democratic education. Historical, sociological, cultural, political, philosophical, and pedagogical foundations of multiculturalism are explored and related to issues of pedagogy in a pluralistic society. This course is taken concurrently with EDCI 20500, which includes a school-based Theory into Practice field experience. Some discussion topics and assignments will be based on that field experience. It is highly recommended that EDCI 27000 be taken with or before taking this course. Typically offered Fall Spring Summer.

EDPS 31500 - Collaborative Leadership: Listening

Credit Hours: 3.00. The purpose of this course is to provide integrated study of listening as a collaborative leadership skill necessary for interpersonal and intrapersonal development. Focus is on the development of professional listening skills, and the understand of the role listening plays in collaborative leadership conflict resolution, interviewing, team building, and ethics. Typically offered Fall Spring Summer.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

- Elective - Credit Hours: 0.00 - 1.00

17 Credits

Fall 2nd Year

EDCI 25000 - Professional Development In Family And Consumer Sciences Education

Credit Hours: 1.00 or 2.00. This course focuses on students' professional development as family and consumer sciences educators. Characteristics and relationships among middle and high school family and consumer sciences standards, resources, and learning experiences; the Purdue Family and Consumer Sciences Education program; and expectations for Indiana FCS teacher-licensure are emphasized. Includes participation in professional organizations and meetings. Typically offered Fall.

EDPS 23500 - Learning And Motivation

Credit Hours: 3.00. Introduction to concepts of learning and motivation in educational contexts (i.e., Educational Psychology). Influence of development, culture, and individual differences on learning and motivation. Uses of assessment and technology in promoting learning and motivation. A field-based experiential component is included. Typically offered Fall Spring Summer.

EDPS 26500 - The Inclusive Classroom

Credit Hours: 3.00. Characteristics of students with special needs/talents; strategies for helping students learn and develop in general educational settings. Emphasis placed upon research evidence, case studies, problem-based learning, and development of a plan for an inclusive classroom. A field-based component is included. Typically offered Spring Summer Fall.

EDCI 35600 - Career Education In Family And Consumer Sciences

Credit Hours: 3.00. Examination of middle and high school career education accomplished through family and consumer sciences, including (1) life and career exploration and planning; (2) analysis of career paths and opportunities in family and consumer sciences; and (3) career preparation through laboratory and cooperative education programs. Historical and contemporary foundations for career education in family and consumer sciences is also addressed. Includes observations and interactions with students and teachers in career-education programs and participation in professional meetings. Typically offered Fall.

BIOL 14600 - Introduction To Biology

Credit Hours: 3.00. This course is designed to introduce non-majors to basic concepts in biology including hypothesis testing, biomolecules, cell structure and function, molecular biology and evolution. Emphasis will be placed on how these topics relate to human health and disease and to the health of the environment. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20100 - Human Anatomy And Physiology

Credit Hours: 2.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

12-14 Credits

Spring 2nd Year

CSR 21500 - Textiles

Credit Hours: 2.00. A basic textiles course dealing with the properties of textile fibers and fabrics and their impact on product performance and consumer satisfaction. Emphasis on retail, apparel, and interior design applications. Typically offered Spring.

CSR 21501 - Textiles Laboratory

Credit Hours: 1.00. Laboratory work to accompany CSR 21500. Typically offered Spring.

CSR 22300 - Apparel Assembly

Credit Hours: 3.00. Experimentation of basic professional techniques for apparel assembly utilizing both domestic and industrial equipment. Course includes apparel construction, fitting, and finishing of a variety of garments. Students gain insight into the relationship between creative design and quality of a finished product. Typically offered Spring.

CSR 12000 - Introduction To Apparel Industry

Credit Hours: 3.00. Introductory course that explores all facets of the apparel industry from its historical beginnings to concept of design and product development, to marketing, to manufacturing, to distribution, to retailing. Throughout the course, the student will learn about the career opportunities within the apparel industry. Typically offered Fall.

HTM 19100 - Sanitation And Health In Foodservice, Lodging, And Tourism

Credit Hours: 3.00. This course introduces students to the foodservice component of the Hospitality and Tourism industry and explores food safety and other health related issues. Application of sanitation principles in restaurants, hospitals, schools, hotels, cruise ships, airlines, and international travel are covered. Students must pass a National Sanitation Certification Examination to receive credit. Typically offered Fall Spring.

NUTR 20200 - Principles Of Food Preparation And Nutrition

Credit Hours: 4.00. Chemical, physical, microbiological, and nutritional principles of food preparation. Functions and sources of nutrients, their relationship to a healthy lifestyle and incorporating the benefits into marketing of foodservice. Typically offered Fall Spring.

NUTR 20201 - Experience In Food Preparation

Credit Hours: 1.00. Application of chemical, physical, microbiological, and nutritional principles in food preparation. Typically offered Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

EDST 20010 - Educational Policies And Laws

Credit Hours: 1.00 to 3.00. The interactive course will provide an understanding of the history of schooling in the United States. A special emphasis will be placed on reviewing historical and contemporary educational policies and educational laws as each subject is critical to understanding social, historical, and cultural issues in the United States. Focus will also be on contemporary applications of historical ideas in the classroom and in school systems. Typically offered Fall Spring.

15 Credits

Fall 3rd Year

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

HTM 29102 - Introduction To Foodservice Management

Credit Hours: 2.00. An introduction to food preparation methods and service techniques in quantity food settings. Students become familiar with ingredients and culinary terminology, and learn to read, write and evaluate menus. Recipe conversion, inventory and costing skills are developed. Production methods and product flow are examined. Front-of-the-house service techniques as well as front-and-back-of-the-house interactions will be studied. Typically offered Fall Spring.

HTM 29101 - Quantity Food Production And Service Laboratory

Credit Hours: 2.00. Basic knowledge of foodservice operations. Students learn and develop food production and service skills in the Boiler Bristo and the John Purdue Room. Students are exposed to quantity cooking methods, the use and care of equipment,

and service techniques as they rotate through various positions commonly found in foodservice operations. All aspects of the dining experience are experienced by students. National Sanitation Certification needed. Typically offered Fall Spring.

HDFS 21200 - Child Observation Practicum

Credit Hours: 2.00. Focuses on the development of observation skills and the understanding of young childrens behavior in group settings. Typically offered Fall.

EDCI 35000 - Community Issues & Applications For Educators

Credit Hours: 2.00 or 3.00. This course is an examination of diverse individual, family, and community characteristics and issues, and potential impacts on teaching and learning processes. Includes service learning with human service agencies and personnel in the school and community. As part of this course, students complete certification to meet the Indiana Department of Education suicide prevention training requirement for teacher licensure. Typically offered Fall.

HDFS 32500 - Health And Health Care For Children And Families

Credit Hours: 3.00. This course discusses leading causes of child health problems as well as examines the child and family reactions and adjustment to illness and disability. A developmental perspective on coping with health problems from early childhood through adolescence is presented. An overview on global child health disparities is also addressed. Typically offered Fall Spring.

HK 20000 - Healthy Lifestyles

Credit Hours: 3.00. Students are provided an opportunity to assess personal behavior patterns related to preventive health services, health protection activities concerning environmental issues, and promotion of a healthful lifestyle. Personal strategies for adopting and maintaining potential health-enhancing behaviors are explored. Typically offered Fall Spring Summer.

EDPS 32700 - Assessment Literacy

Credit Hours: 1.00 to 3.00. Evaluating the impact of instruction on student performance is one of the most important skills for an educator. Effective teachers ask themselves, "How do I know if students are truly learning? Are they meeting educational objectives in the content area?" Using well-chosen assessment approaches, teachers can address these questions. In this course, students will acquire assessment literacy: the ability to gather accurate information about student achievement, and use that information to make instructional decisions that will improve learning. Course activities will focus on assessment tasks relevant to P- 12 classroom settings. Typically offered Fall Spring.

15 Credits

Spring 3rd Year

HTM 17300 - Introduction To Tourism Management

Credit Hours: 3.00. This is an introduction to tourism management using a system approach that integrates a variety of hospitality and travel organizations and businesses. It focuses on the understanding of tourism from the perspectives of travelers and destinations, while identifying tourism's economic, socio-cultural, and environmental impacts on communities. Typically offered Fall Spring.

HTM 18100 - Lodging Management

Credit Hours: 3.00. Organization, management and operating procedures of lodging facilities. Guest-employee interactions will be analyzed along with current trends and cutting edge topics in the lodging industry. A history of the lodging industry will be discussed. Typically offered Fall Spring.

EDCI 36000 - Curriculum And Instruction In Family And Consumer Sciences: Middle School

Credit Hours: 3.00. Instructional program development for family and consumer sciences. Developmental needs and issues of early adolescents; study of adolescent literacy; and curriculum integration of language arts, math, and other content areas are emphasized. Development of a comprehensive unit of instruction that incorporates standard-based curriculum, assessment, and instruction for family and consumer sciences is a major component of the course. Includes observations and interactions with family and consumer sciences teachers and students and participation in professional meetings. Typically offered Spring.

CSR 34200 - Personal Finance

Credit Hours: 3.00. The class covers a comprehensive discussion of investments, consumer credit, insurance and retirement issues. The goal is to show how these components are interconnected in order to create a complete picture of financial health of an individual. Typically offered Spring Summer Fall. CTL:IPO 1811 Personal Finance

- Content Select (Sci, Tech, & Society) - Credit Hours: 3.00 ⁴

ECON 21900 - Economics For Future Elementary Teachers

Credit Hours: 3.00. A principles of economics course designed for future elementary and social studies teachers. The purpose of this course is to: 1) introduce the future teacher to basic economic concepts required by the Indiana Academic Standards for Social Studies, K-6, 2) learn methods for teaching these concepts in the K-6 curriculum, and 3) develop a catalog of curriculum materials appropriate for teaching economics in grades K-6. No credit for management students. Typically offered Fall Spring.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

EDPS 49100 - Topics And Issues In Education

Credit Hours: 1.00 to 3.00. Provides student with opportunity to strengthen preparation through study of selected educational topics and issues based upon individual needs and interests. One topic is considered in each enrollment. Typically offered Fall Spring Summer.

16 Credits

Fall 4th Year

EDCI 44400 - Methods for Teaching Family and Consumer Sciences

Credit Hours: 4.00. The culminating on-campus teacher-education course for the Purdue University Family and Consumer Sciences program. The course builds and consolidates teacher-candidates' knowledge and skills for teaching family and consumer sciences. Emphasis placed on standards-based instructional planning and materials; instructional strategies, including laboratories, assessment of student learning, and classroom management. Course includes field experiences. Program content requirements should be completed previous to or concurrent with this course. Typically offered Fall.

HDFS 33000 - Sexuality And Family Life

Credit Hours: 3.00. Provides the student with a basic knowledge of human sexuality as it pertains to individuals, couples and families. The course is designed to be helpful to students who will become family life educators as well as to be helpful to students as individuals, spouses, and parents. Typically offered Fall Spring.

HDFS 33200 - Stress And Coping In Contemporary Families

Credit Hours: 3.00. Examines theoretical perspectives related to family stress and resilience in multicultural and diverse family settings, and connects these perspectives to empirical work on family dynamics, coping, and dysfunction across the lifespan. Topics such as economic stress and poverty, immigrant families, single-parent families, homeless families, adoption, military families, maltreatment, and families coping with illness are explored. The class focuses on environmental, cultural, as well as biological contributions to both risk and resilience processes in individuals and families. Typically offered Fall Spring

- Content Area Selective - Credit Hours: 3.00 ⁵

AD 12500 - Introduction To Interior Design

Credit Hours: 3.00. Introductory survey of interior spaces and their impact upon the physical, social, psychological, and aesthetic needs of people. Critical evaluation of concepts in the interior design profession and related fields will be emphasized. Typically offered Fall.

13 Credits

Spring 4th Year

Professional Semester 4

EDCI 49800 - Supervised Teaching

Credit Hours: 8.00 to 16.00. Teaching full time in a school classroom under the supervision of the teacher in charge of the class and a University supervisor. Completion of education methods courses and other Gate requirements for the major area and admittance to teacher education required. Typically offered Fall Spring Summer.

- EDCI 49800 - Supervised Teaching - Credit Hours: 8.00

16 Credits

Notes

¹ CSR 215 and CSR 21501 is only a spring course

² If completing the Human Services Concentration, must complete HDFS 33100 instead of EDCI 35000

³ If completing the Human Services Concentration, must complete HDFS 32500

⁴ If completing the Human Services Concentration, Take STAT 11300- It will also fulfill Science, Technology, and Society requirement

⁵ If doing the Human Services Concentration, must take HDFS 34300, HDFS 34800, or HDFS 34100

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Human Services, BS

About the Program

If you are interested in working with people to help improve their life circumstances, the Human Services major may be an excellent choice for you. Students in this major are concerned about today's individuals and families and want to help them find solutions to challenging circumstances.

Human Services students are trained for a variety of careers in community-based programs, home-based programs, health-related social services, and mental health organizations. The Human Services option is designed to provide students with basic knowledge in human development and family studies, skills for working with people in service agencies, and program evaluation skills. Throughout the academic program, students develop knowledge and skills to work with children, adults and families.

With the help of their academic advisors, students select courses to meet the requirements of the major and their individual interests and needs. Students are prepared to serve their communities through internships, application of coursework and development of professional skills in the work force.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Human Services include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

HDFS-BS
XHBS
120 credits

Major Requirements (45 credits)

HDFS 10000 - Orientation To Current Issues In Human Development And Family Studies

Credit Hours: 1.00. Introduction to fields related to Human Development and Family studies, including majors and career paths. You will meet faculty, alumni, and professionals working in related areas. You will be matched with an advanced student mentor

who will help you learn how to become successful as a HDFS student any beyond. Required of all students majoring in the department. Non-majors interested in learning more about HDFS majors are also welcome. Typically offered Fall.

HDFS 20100 - Introduction To Family Processes

Credit Hours: 3.00. An examination of the interpersonal processes that take place within family contexts. Emphasis is on family dynamics. Also considered are linkages between family processes and the broader social environment. Basic components of the research process will be introduced. Typically offered Fall Spring Summer.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

HDFS 28000 - Diversity In Individual And Family Life

Credit Hours: 3.00. Students are introduced to aspects of individual and family life in diverse cultures, particularly racially and/or ethnically diverse families in the United States. The nature of relationships between dominant and minority cultures is considered. Implications of diversity for practice with diverse populations are emphasized throughout the course. Typically offered Fall Spring Summer.

HDFS 34600 - Research Design And Program Evaluation

Credit Hours: 3.00. This course is an introduction to research methods as used in community programs for children and families including review and application of existing research literature, generating research questions, conducting program needs assessments, evaluating processes and outcomes of existing programs, designing and interpreting applied research studies, and understanding ethical responsibilities in the use and application of research. Instruction has been designed to provide the skills necessary to use existing research and generate new data to benefit programs. Typically offered Fall Spring.

HDFS 45400 - Career Assessment And Professional Development

Credit Hours: 2.00. This course includes an overview of HDFS-related professions, self-evaluation, career search skills, exploration of internship opportunities, and professional development. Students will complete arrangements for their field placement. Typically offered Fall Spring.

Advanced Content Courses Selective - (Select 9 credits)

HDFS 30500 - Biosocial Foundations Of The Family

Credit Hours: 3.00. Family ties and family processes in the promotion of individual health and management of disease across the life course are covered. Course reviews research on families and health from multiple disciplinary perspectives. Typically offered Fall Spring.

HDFS 31100 - Child Development

Credit Hours: 3.00. This course addresses the study of development from infancy through childhood. It includes processes of physical, cognitive, language, social, and emotional development. Processes are discussed within the framework of historical and contemporary theories and current research. In addition, it covers topics related to methodologies used in the study of infant and child development. Finally, the conditions of children in different parts of the world are considered. Typically offered Fall Spring.

HDFS 31200 - Adult Development

Credit Hours: 3.00. An in-depth study of developmental processes from the transition to adulthood through old age. Particular emphasis is placed on understanding the influence of contexts on adult development. Typically offered Fall Spring.

HDFS 31300 - Adolescent Development

Credit Hours: 3.00. An overview of the normative developmental changes that occur during adolescence, with specific attention to individual and relational adjustment. Typically offered Fall Spring.

HDFS 33000 - Sexuality And Family Life

Credit Hours: 3.00. Provides the student with a basic knowledge of human sexuality as it pertains to individuals, couples and families. The course is designed to be helpful to students who will become family life educators as well as to be helpful to students as individuals, spouses, and parents. Typically offered Fall Spring.

HDFS 33200 - Stress And Coping In Contemporary Families

Credit Hours: 3.00. Examines theoretical perspectives related to family stress and resilience in multicultural and diverse family settings, and connects these perspectives to empirical work on family dynamics, coping, and dysfunction across the lifespan. Topics such as economic stress and poverty, immigrant families, single-parent families, homeless families, adoption, military families, maltreatment, and families coping with illness are explored. The class focuses on environmental, cultural, as well as biological contributions to both risk and resilience processes in individuals and families. Typically offered Fall Spring

Practical Skills Courses Selective - (9 credits)

HDFS 33100 - Skills For Helping Professionals In Individual, Family And Group Settings

Credit Hours: 3.00. This course is an introduction to skills commonly used in helping professions, including relationship-building skills, beginning interviewing skills, and group process skills. Attention is paid to cultural competence and professional ethics. This course includes a weekly "lab" experience involving practice of the helping skills, as well as a service-learning project in which helping skills are used in a community setting. Typically offered Fall Spring.

HDFS 34100 - Working With Parents

Credit Hours: 3.00. This course focuses on developing and maintaining effective relationships between parents and professionals working with children, within the context of family-centered practices. Issues related to cultural, linguistic, economic, and developmental differences that affect relations between families and professionals are examined. Typically offered Spring Fall.

HDFS 34800 - Administration Of Social Service Not-For-Profit Organizations

Credit Hours: 3.00. This course introduces students to aspects of not-for-profit management identified as keys by leaders in existing agencies. Students will prepare themselves for specifically establishing, building, working in and leading not-for-profit organizations. Typically offered Fall.

HDFS 34300 - Assessment And Case Management

Credit Hours: 3.00. This course is an introduction to case management as a service delivery approach for helping individuals and families in need. This course provides opportunities to practice basic helping and case management skills such as building rapport, assessing client needs, developing intervention plans, professional ethics, and professional writing. Typically offered Fall Spring.

Capstone Requirement (12 credits - select one option)

HDFS 45500 - Human Services Capstone Internship

Credit Hours: 6.00 or 12.00. Supervised full-time or half- time internship in human services, doing work typical of an entry-level bachelor-degreed professional. Students will integrate and build upon knowledge developed during their studies in human services. Students will use and enhance their skills in direct service to client or indirect service. Students will work in the placement setting secured during HDFS 45400. Example field placement sites include: government or community agencies; social service agencies; hospitals; and recreational settings. Permission of Department required. Must be a student in good academic standing during the internship semester. Typically offered Fall Spring Summer.

or

- HDFS 45500 - Human Services Capstone Internship - Credit Hours: 6.00 and
- 6 credits HDFS coursework - 300 level or above - Credit Hours: 3.00 each

Required Courses in Other Departments (39-46 credits)

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

COM 20400 - Critical Perspectives On Communication

Credit Hours: 3.00. Introduction to critical thinking and writing about communication. Draws on humanistic and qualitative traditions to help students learn and apply critical approaches to understanding communication. . Typically offered Summer Fall Spring.
(IF ENGL 10600 selected, fulfills Written Communication and Information Literacy Cores)

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

- 10100 Foreign Language - Credit Hours: 3.00 (Total of 9 credits - must be from one language)
- 10200 - Credit Hours: 3.00
- 20100 - Credit Hours: 3.00
- Human Health Selective - select from list - Credit Hours: 3.00
- Global Perspectives & International Cultures Selective - select from list - Credit Hours: 3.00

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

SOC 38200 - Introduction To Statistics In Sociology

Credit Hours: 3.00. Introduction to the basic techniques of statistical analysis applicable to sociological data. Elementary descriptive statistics and statistical inference. Introduction to multivariate analysis. Typically offered Fall Spring.

PSY 20100 - Introduction To Statistics In Psychology

Credit Hours: 3.00. An introduction to the development and application of statistical, quantitative, and measurement techniques pertinent to the psychological sciences. Fundamental concepts of numerical assignment, sampling theory, distribution functions, experimental design, inferential procedures, and statistical control. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

(IF STAT 11300 selected, fulfills Information Literacy and Science, Technology, & Society Cores. IF STAT 30100 selected, fulfills Information Literacy Core)

- [Humanities Core] - select from University list - Credit Hours: 3.00
- [Information Literacy Core] - select from University list (IF ENGL 10600, STAT 11300 or STAT 30100 is selected for other requirements, this requirement is fulfilled) - Credit Hours: 0.00 - 3.00
- [Oral Communication Core] - select from University list - Credit Hours: 3.00
- [Quantitative Reasoning Core] - select course numbered 15300 or above from University list (MA 15555 is recommended) - Credit Hours: 3.00
- [Science Core] - select from University list - Credit Hours: 3.00
- [Science Core] - select from University list - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list (IF STAT 11300 is selected for other requirements, this requirement is fulfilled) - Credit Hours: 0.00 - 3.00

Electives (29-36 credits)

120 semester credits required for Bachelor of Science degree

At least 32 credits of coursework required at 300 level or higher to meet graduation requirements.

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Human Health Selective List

ANTH 34000 - Global Perspectives On Health

Credit Hours: 3.00. This course examines health issues and risks faced by individuals around the world, but especially in resource poor geographical areas. We will explore in-depth the gendered, ethnic, cultural, and class dimensions that underlie the patterning of disease and illness worldwide. Typically offered Fall Spring.

HDFS 32500 - Health And Health Care For Children And Families

Credit Hours: 3.00. This course discusses leading causes of child health problems as well as examines the child and family reactions and adjustment to illness and disability. A developmental perspective on coping with health problems from early childhood through adolescence is presented. An overview on global child health disparities is also addressed. Typically offered Fall Spring.

HK 22600 - Contemporary Women's Health

Credit Hours: 3.00. Examines behavioral, psychological, and sociocultural aspects of women's experience in healthcare systems. Includes the influence of factors such as age, social class, and ethnicity on women's roles as recipients and providers of health care. Typically offered Fall Spring.

HK 23100 - Substance Abuse And Health

Credit Hours: 3.00. The study of drug abuse and drug education, including stimulants, depressants, psychedelics, and other drugs and harmful substances; beverage alcohol usage and health effects of tobacco smoking. Education materials and techniques are examined. Typically offered Summer Fall Spring.

HSCI 20100 - Principles of Public Health Science

Credit Hours: 3.00. This course begins with a definition of public health and a review of its history and its role in disease

prevention. The basic tools of public health practice, vital statistics and epidemiology, are then presented. After gaining an understanding of how these tools are used in assessing the health status of a community, the etiology and control of infectious and non-infectious threats to our health will be examined. The course concludes with risk analysis as a basis for public health policy determination. Typically offered Spring.

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

Global Perspectives & International Cultures Selective List

ANTH 23000 - Gender Across Cultures

Credit Hours: 3.00. Explores gender and sexuality from a cross-cultural perspective. Draws on case studies to explore the complexities of women's and men's lives. Examines gender hierarchies, gender in a globalized world, and the cultural construction of sexuality and gender. Typically offered Summer Fall Spring.

ARAB 23900 - Arab Women Writers

Credit Hours: 3.00. Survey of Arab women writers from North Africa, the Middle East, and Arab communities in the western world. Emphasis on issues of sexuality, marriage, work, travel and immigration. Conducted in English; no knowledge of Arabic required. Typically offered Fall Spring.

ARAB 28000 - Arabic Culture

Credit Hours: 3.00. A historical and literary survey of defining characteristics of Arabic culture from pre-Islamic times to the modern period. Typically offered Summer Fall Spring.

ARAB 28100 - Introduction To Islamic Civilization And Culture

Credit Hours: 3.00. This course is a survey of broad currents in the cultures, thought and civilization of the Muslim world. It emphasizes religious, intellectual and cultural trends, social and political structures and contemporary issues of Muslim societies within the current global cultural world. Taught in English. Typically offered Fall Spring Summer.

CHNS 23000 - Chinese Literature In Translation

Credit Hours: 3.00. Reading and discussion of selected texts from major writers and genres. The course provides a broad survey

of the Chinese literacy tradition and its cultural and historical background. Emphasis may vary from year to year. Knowledge of Chinese not required. Typically offered Fall Spring.

CHNS 28000 - Topics in Chinese Civilization and Culture

Credit Hours: 3.00. Selected topics on Chinese civilization and culture including history and geography, Confucianism, contemporary China, education, family, international cultural and economic cooperation. Course materials also cover most current issues on and in Chinese-speaking communities. Lectures in English. Typically offered Fall Spring.

CLCS 18100 - Classical World Civilizations

Credit Hours: 3.00. Course introduces students to "Classical" civilizations on three continents (Europe, Africa, and Asia) demonstrably interconnected by an ancient world system. Course focuses on essential themes of past civilization: religion, philosophy, surviving texts, gender relations, urbanism, technology, social and political formations. Typically offered Summer Fall Spring.

CMPL 26700 - World Literature: From 1700 A D To The Present

Credit Hours: 3.00. (ENGL 26700) World literature in translation. A comparative and chronological survey of the masterpieces of Eastern and Western literature. Typically offered Spring Summer Fall.

FR 23000 - French Literature In Translation

Credit Hours: 3.00. Reading and analysis of selected French writers and their works, with particular emphasis on the social, political, and intellectual climate of their times. The course content will change from semester to semester. Knowledge of French not required. Typically offered Fall Spring Summer.

FR 33000 - French Cinema

Credit Hours: 3.00. A general survey of major French cinematic trends from the earliest examples (Melies, Lumiere) to the New Wave (Chabrol, Truffaut, Resnais, Godard, etc.), with a discussion of the historical, social, political, aesthetic, and literary contexts. The French film in relation to world cinema. The relationship between the French cinema and French literature. Reading and analysis of scripts and historical and critical materials. Knowledge of French not required. Typically offered Fall Spring Summer.

GER 23000 - German Literature In Translation

Credit Hours: 3.00. Reading and analysis of selected German writers and their works, with particular emphasis on the social, political, and intellectual climate of the times. The course content will change from semester to semester. Knowledge of German not required. Typically offered Fall Spring Summer.

GER 33000 - German Cinema

Credit Hours: 3.00. Viewing and analysis of major German contributions to the cinema from the earliest period to the present. Emphasis on relevant aesthetic theories and on the schools of literature and painting that served as sources. Evaluation of the German film on the basis of social, artistic, and political criteria. Knowledge of German not required. Typically offered Fall Spring Summer.

HDFS 22500 - Human Development and Family Studies

Credit Hours: 3.00: This course provides a basis for interdisciplinary exploration of cross-cultural human development and family relations throughout the lifespan. Key topics include international variation in cultural understandings of parent-child relationships, gender roles, education, work, social relationships, and health/wellness. Students will explore professional applications in an increasingly globalized world. Typically offered Fall Spring.

HIST 34000 - Modern China

Credit Hours: 3.00. Chinese history from the Qing Dynasty (1644) to the present, with emphasis on the period since 1800. Attention given to internal developments and China's response to Western thought and material accomplishments. Nationalism and communism in the twentieth century are examined. Typically offered Spring.

ITAL 28000 - Italian Culture And Civilization

Credit Hours: 3.00. Course focuses on salient aspects of Italian culture and civilization from the Middle Ages to the present. In English. Typically offered Fall Spring Summer.

ITAL 33000 - The Italian Cinema

Credit Hours: 3.00. The development and evolution of Italian cinema after World War II. The class will center on the viewing and discussion of films and will survey a broad spectrum of directors and styles. Knowledge of Italian not required. Typically offered Fall Spring Summer.

JPNS 23000 - Japanese Literature In Translation

Credit Hours: 3.00. Reading and discussion of selected texts from major writers and genres. The course provides a broad survey of the Japanese literary tradition and its cultural and historical background. Emphasis may vary from year to year. Knowledge of Japanese not required. Typically offered Fall Spring.

JPNS 33000 - Japanese Cinema

Credit Hours: 3.00. A survey of the development of Japanese cinema after World War II. The class focuses on the viewing and discussion of the films and examines a variety of directors with different styles and thematic messages. Typically offered Fall Spring.

LC 23500 - East Asian Literature In Translation

Credit Hours: 3.00. Reading and discussion of selected East Asian poetry, prose, and drama. Focus will be on the traditions of China and Japan, but may include works of other cultures such as Korea. Emphasis may vary yearly, stressing traditional or modern literatures. Typically offered Fall Spring.

LC 23900 - Women Writers In Translation

Credit Hours: 3.00. An examination of international female writers' literary creativity in the context of women's studies and feminist theory, as articulated in their specific cultural and geographical milieu. Course content will vary in terms of cultural focus. In English. Typically offered Fall Spring Summer.

PHIL 11400 - Global Moral Issues

Credit Hours: 3.00. A systematic and representative examination of significant contemporary moral problems with a focus on global issues such as international justice, poverty and foreign aid, nationalism and patriotism, just war, population and the environment, human rights, gender equality, and national self-determination. Typically offered Fall Spring Summer.

PHIL 23000 - Religions Of The East

Credit Hours: 3.00. (REL 23000) A study of the history, teachings, and present institutions of the religions of India, Southeast Asia, China, and Japan. This will include Hinduism, Jainism, Sikhism, Buddhism, Confucianism, Taoism, Shintoism, and Zoroastrianism. Typically offered Fall Spring Summer.

POL 13000 - Introduction To International Relations

Credit Hours: 3.00. An analysis of the fundamentals of international law, organization, and politics, particularly as relevant to contemporary international relations. Typically offered Summer Fall Spring. CTL:ISH 1003 Introduction To World Politics

PTGS 33000 - Brazilian, Portuguese, And African Cinema

Credit Hours: 3.00. Screening and analysis of selected films from Portuguese- speaking countries: Brazil, Portugal, Angola, Mozambique, Cape Verde, Guinea-Bissau, S. Tome and Principe, with discussion of their cultural contexts (colonial/post-colonial societies; cross-Atlantic relationships; racial diversity; minority/majority issues). Knowledge of Portuguese not required. Typically offered Summer Fall Spring.

RUSS 33000 - Russian And East European Cinema

Credit Hours: 3.00. Viewing and analysis of significant Russian and East European films. Evolution of the Russian and East European cinema, its place in world cinema, and its relation to cultural, political, and social trends. Cinematic adaptation of literary and theatrical works. Knowledge of Russian or East European languages not required. Typically offered Fall Spring Summer.

SPAN 33000 - Spanish And Latin American Cinema

Credit Hours: 3.00. Screening and analysis of selected Spanish and Latin American films with readings and discussions relative to their historical, social, political, aesthetic, literary, and linguistic contexts. No knowledge of Spanish required. Typically offered Fall Spring Summer.

Note

*Also fulfills Humanities University Foundational Core Requirement

Program Requirements

Fall 1st Year

HDFS 10000 - Orientation To Current Issues In Human Development And Family Studies

Credit Hours: 1.00. Introduction to fields related to Human Development and Family studies, including majors and career paths. You will meet faculty, alumni, and professionals working in related areas. You will be matched with an advanced student mentor who will help you learn how to become successful as a HDFS student any beyond. Required of all students majoring in the department. Non-majors interested in learning more about HDFS majors are also welcome. Typically offered Fall.

HDFS 20100 - Introduction To Family Processes

Credit Hours: 3.00. An examination of the interpersonal processes that take place within family contexts. Emphasis is on family dynamics. Also considered are linkages between family processes and the broader social environment. Basic components of the research process will be introduced. Typically offered Fall Spring Summer.

- CORE: Oral Communication - Credit Hours: 3.00

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

- Foreign Language - Credit Hours: 3.00

CS 11000 - Introduction To Computers

Credit Hours: 3.00. Computer applications and how they can be used for solving problems in everyday life. The Internet with an emphasis on obtaining information from the World Wide Web, use of a database with an emphasis on data storage and retrieval, spreadsheets, word processing, presentation software, integration of multiple software packages. May not be taken for credit by Computer Science majors. Typically offered Summer Fall Spring.

CNIT 13600 - Personal Computing Technology And Applications

Credit Hours: 3.00. This course provides an intermediate coverage of PC technology and problem solving. Topics include computer hardware, operations and ethics, and operating systems and environments. Students will gain hands-on skills with applications such as desktop and file management; word processing; spreadsheets; presentation graphics; electronic mail; personal information management; and internet browsing, searching, and publishing. Typically offered Fall Spring Summer.

16 Credits

Spring 1st Year

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

- CORE: Science - Credit Hours: 3.00
- Gl. Perspectives and Int. Cultures - Credit Hours: 3.00
- Foreign Language - Credit Hours: 3.00
- Elective - Credit Hours: 0.00 - 1.00

16 Credits

Fall 2nd Year

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

SOC 38200 - Introduction To Statistics In Sociology

Credit Hours: 3.00. Introduction to the basic techniques of statistical analysis applicable to sociological data. Elementary descriptive statistics and statistical inference. Introduction to multivariate analysis. Typically offered Fall Spring.

PSY 20100 - Introduction To Statistics In Psychology

Credit Hours: 3.00. An introduction to the development and application of statistical, quantitative, and measurement techniques pertinent to the psychological sciences. Fundamental concepts of numerical assignment, sampling theory, distribution functions, experimental design, inferential procedures, and statistical control. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

- CORE: Information Literacy - Credit Hours: 3.00
- CORE: Science - Credit Hours: 3.00
- HDFS Adv Content - Credit Hours: 3.00
- Foreign Language - Credit Hours: 3.00

15 Credits

Spring 2nd Year

- Human Health Selective - Credit Hours: 3.00
- HDFS Adv Content - Credit Hours: 3.00

HDFS 34600 - Research Design And Program Evaluation

Credit Hours: 3.00. This course is an introduction to research methods as used in community programs for children and families including review and application of existing research literature, generating research questions, conducting program needs assessments, evaluating processes and outcomes of existing programs, designing and interpreting applied research studies, and understanding ethical responsibilities in the use and application of research. Instruction has been designed to provide the skills necessary to use existing research and generate new data to benefit programs. Typically offered Fall Spring.

- CORE: Humanities - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

HDFS 28000 - Diversity In Individual And Family Life

Credit Hours: 3.00. Students are introduced to aspects of individual and family life in diverse cultures, particularly racially and/or ethnically diverse families in the United States. The nature of relationships between dominant and minority cultures is considered. Implications of diversity for practice with diverse populations are emphasized throughout the course. Typically offered Fall Spring Summer.

HDFS 33100 - Skills For Helping Professionals In Individual, Family And Group Settings

Credit Hours: 3.00. This course is an introduction to skills commonly used in helping professions, including relationship-building skills, beginning interviewing skills, and group process skills. Attention is paid to cultural competence and professional ethics. This course includes a weekly "lab" experience involving practice of the helping skills, as well as a service-learning project in which helping skills are used in a community setting. Typically offered Fall Spring.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

HDFS 34300 - Assessment And Case Management

Credit Hours: 3.00. This course is an introduction to case management as a service delivery approach for helping individuals and families in need. This course provides opportunities to practice basic helping and case management skills such as building rapport, assessing client needs, developing intervention plans, professional ethics, and professional writing. Typically offered Fall Spring.

- HDFS Adv Content - Credit Hours: 3.00
- CORE: Science, Tech, & Society - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

HDFS 45400 - Career Assessment And Professional Development

Credit Hours: 2.00. This course includes an overview of HDFS-related professions, self-evaluation, career search skills, exploration of internship opportunities, and professional development. Students will complete arrangements for their field placement. Typically offered Fall Spring.

HDFS 34100 - Working With Parents

Credit Hours: 3.00. This course focuses on developing and maintaining effective relationships between parents and professionals working with children, within the context of family-centered practices. Issues related to cultural, linguistic, economic, and developmental differences that affect relations between families and professionals are examined. Typically offered Spring Fall.

HDFS 34800 - Administration Of Social Service Not-For-Profit Organizations

Credit Hours: 3.00. This course introduces students to aspects of not-for-profit management identified as keys by leaders in existing agencies. Students will prepare themselves for specifically establishing, building, working in and leading not-for-profit organizations. Typically offered Fall.

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 2.00

16 Credits

Spring 4th Year

HDFS 45500 - Human Services Capstone Internship

Credit Hours: 6.00 or 12.00. Supervised full-time or half-time internship in human services, doing work typical of an entry-level bachelor-degreed professional. Students will integrate and build upon knowledge developed during their studies in human services. Students will use and enhance their skills in direct service to client or indirect service. Students will work in the placement setting secured during HDFS 45400. Example field placement sites include: government or community agencies; social service agencies; hospitals; and recreational settings. Permission of Department required. Must be a student in good academic standing during the internship semester. Typically offered Fall Spring Summer.

12 Credits

Note

Total credits needed for graduation: 120

Upper division (300 and 400 level) credits needed for graduation: 32

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Human Development and Family Studies Minor

A grade of "C-" or better must be earned in any course used to fulfill the HDFS minor.

Required (6 Credits)

HDFS 20100 - Introduction To Family Processes

Credit Hours: 3.00. An examination of the interpersonal processes that take place within family contexts. Emphasis is on family dynamics. Also considered are linkages between family processes and the broader social environment. Basic components of the research process will be introduced. Typically offered Fall Spring Summer.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

Select Three (3) of the Following Courses (9 Credits)

HDFS 28000 - Diversity In Individual And Family Life

Credit Hours: 3.00. Students are introduced to aspects of individual and family life in diverse cultures, particularly racially and/or ethnically diverse families in the United States. The nature of relationships between dominant and minority cultures is considered. Implications of diversity for practice with diverse populations are emphasized throughout the course. Typically offered Fall Spring Summer.

HDFS 30500 - Biosocial Foundations Of The Family

Credit Hours: 3.00. Family ties and family processes in the promotion of individual health and management of disease across the life course are covered. Course reviews research on families and health from multiple disciplinary perspectives. Typically offered Fall Spring.

HDFS 31100 - Child Development

Credit Hours: 3.00. This course addresses the study of development from infancy through childhood. It includes processes of physical, cognitive, language, social, and emotional development. Processes are discussed within the framework of historical and contemporary theories and current research. In addition, it covers topics related to methodologies used in the study of infant and child development. Finally, the conditions of children in different parts of the world are considered. Typically offered Fall Spring.

HDFS 31200 - Adult Development

Credit Hours: 3.00. An in-depth study of developmental processes from the transition to adulthood through old age. Particular emphasis is placed on understanding the influence of contexts on adult development. Typically offered Fall Spring.

HDFS 31300 - Adolescent Development

Credit Hours: 3.00. An overview of the normative developmental changes that occur during adolescence, with specific attention to individual and relational adjustment. Typically offered Fall Spring.

HDFS 32500 - Health And Health Care For Children And Families

Credit Hours: 3.00. This course discusses leading causes of child health problems as well as examines the child and family reactions and adjustment to illness and disability. A developmental perspective on coping with health problems from early childhood through adolescence is presented. An overview on global child health disparities is also addressed. Typically offered Fall Spring.

HDFS 33000 - Sexuality And Family Life

Credit Hours: 3.00. Provides the student with a basic knowledge of human sexuality as it pertains to individuals, couples and families. The course is designed to be helpful to students who will become family life educators as well as to be helpful to students as individuals, spouses, and parents. Typically offered Fall Spring.

HDFS 33200 - Stress And Coping In Contemporary Families

Credit Hours: 3.00. Examines theoretical perspectives related to family stress and resilience in multicultural and diverse family settings, and connects these perspectives to empirical work on family dynamics, coping, and dysfunction across the lifespan. Topics such as economic stress and poverty, immigrant families, single-parent families, homeless families, adoption, military families, maltreatment, and families coping with illness are explored. The class focuses on environmental, cultural, as well as biological contributions to both risk and resilience processes in individuals and families. Typically offered Fall Spring

HDFS 34100 - Working With Parents

Credit Hours: 3.00. This course focuses on developing and maintaining effective relationships between parents and professionals working with children, within the context of family-centered practices. Issues related to cultural, linguistic, economic, and developmental differences that affect relations between families and professionals are examined. Typically offered Spring Fall.

HDFS 39000 - Special Topics In HDFS

Credit Hours: 1.00 to 6.00. Supervised readings, discussion, lectures and/or research on special topics in family and individual development. Permission of instructor required. Typically offered Summer Fall Spring.

HDFS 39800 - International Special Topics

Credit Hours: 1.00 to 6.00. Course taken during an international experience that is recognized by the University. Typically offered Fall Spring Summer.

Total Credits 15

School of Nursing

About

The School of Nursing is responsible for administering all degree programs in nursing offered at the West Lafayette campus of Purdue University.

A broad liberal and scientific education is necessary to prepare baccalaureate nursing program students for professional nursing practice. The Purdue University School of Nursing curriculum provides each student with a firm foundation in the liberal arts, supportive sciences, and professional education. Education of the professional nurse is enriched by a diverse faculty who have clinical expertise and scholarly achievement by participation in continuing education and in professional nursing organizations.

Following successful completion of the program of study, the nursing graduate may apply to take the National Council Licensure Examination (NCLEX) for licensure as a registered nurse (RN). There are specific requirements for eligibility to take the examination. Any person who applies to the Indiana State Board of Nursing for license to practice as a registered nurse must not have been convicted of a crime that has a direct bearing on the person's ability to competently practice or have committed an act that would constitute a ground for disciplinary sanction under Indiana statutes.

Eligibility requirements in other states may vary. You may request a copy of eligibility requirements by writing to the Board of Nursing in the state in which you are seeking licensure.

Faculty

<https://www.purdue.edu/hhs/nur/directory/faculty/index.html>

Contact Information

Undergraduate Programs
School of Nursing
Johnson Hall, Room 109
502 N. University Street
West Lafayette, IN 47907-2069
Phone: 765-494-4004

Fax: 765-496-1800
E-mail: nursing@purdue.edu

Graduate Information

For Graduate Information please see Nursing Graduate Program Information.

Nursing, BSN

About the Program

The School of Nursing offers programs from baccalaureate to doctoral level, including:

Four-year baccalaureate program for high school graduates

Second degree baccalaureate program

Master of Science (MS) as an Adult Gerontology Nurse Practitioner

Master of Science (MS) as a Primary Care Pediatric Nurse Practitioner

Post master's Adult Gerontology Nurse Practitioner Certificate

Post master's Primary Care Pediatric Nurse Practitioner Certificate

Doctor of Nursing Practice

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Nursing include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

NURSG-BSN
NRS
120 Credits

Major Requirements (117-118 credits)

General Required Courses (15-16 credits)

Minimum grade of C required in each course

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HONR 19903 - Interdisciplinary Approaches In Writing

Credit Hours: 3.00. This course is a writing-intensive course in which students learn how to find, evaluate, and use credible information, how to express themselves well in a variety of different written genres, and how to write for different audiences. Typically offered Fall Spring.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

PSY 35000 - Abnormal Psychology

Credit Hours: 3.00. Various forms of mental disorders from the standpoint of their origin, treatment, prevention, social significance, and relation to problems of normal human adjustment. Typically offered Fall Spring Summer. CTL:ISH 1023 Abnormal Psychology

Required Science Courses (18 credits)

Minimum grade of C required in each course. Average GPA of this area must be 2.70 or better

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

Required Nursing Courses Level I (23 credits)

Minimum grade of C required in each course. Average GPA of this area must be 2.75 or better

NUR 10800 - Introduction To Nursing

Credit Hours: 1.00. Introduce students entering the nursing profession to foundations of the baccalaureate nursing curriculum, including concepts, competencies, mandatory requirements and responsibilities within the profession. Students are introduced to the rigor of the curriculum and begin to build a sense of community within the Purdue School of Nursing. Typically offered Fall.

NUR 21801 - Health Assessment And Essentials Of Nursing Practice I

Credit Hours: 5.00. Focuses on the beginning concepts and principles for the professional nurse while developing fundamental skills in a nursing process framework. Through lecture and clinical learners begin to apply skills in communication and assessment. Emphasis is placed on developing physical examination skills, obtaining health histories and performing client centered safe nursing care to meet basic healthcare needs in diverse populations across the lifespan. Typically offered Fall Spring Summer.

NUR 21901 - Pathopharmacology I

Credit Hours: 3.00. An introduction to the study of underlying changes in primary physiologic regulatory mechanisms affecting homeostasis, metabolic processes, immune response, circulation, renal elimination, fluid/electrolyte and acid/base balance, sensory perception and alteration in comfort and the pharmacotherapies utilized as treatment for alterations and disease states. This introductory knowledge provides the foundation for the understanding and practice of general nursing. Typically offered Fall Spring Summer.

NUR 22001 - Essentials Of Nursing Practice II

Credit Hours: 5.00. Continues to expand on the professional nursing role supported by fundamental concepts and principles of the nursing process in lecture and clinical settings. Learners apply communication, assessment and nursing skills while caring for the needs of clients in diverse populations across the lifespan. Typically offered Fall Spring Summer.

NUR 22101 - Pathopharmacology II

Credit Hours: 3.00. An introduction to the study of underlying changes in primary physiologic regulatory mechanisms affecting respiratory, hematologic, endocrine, neurologic, neuromuscular, gastrointestinal and reproductive function and the pharmacotherapies utilized as treatment for alterations and disease states. This course builds on the learning objectives from Pathopharmacology I to provide the foundation for the understanding and practice of general nursing. Typically offered Fall Spring Summer.

NUR 22201 - Population Health

Credit Hours: 2.00. A comprehensive introduction to population health concepts and practices through examination of philosophy, purpose, functions, activities and tools. Multiple determinants (genetics, cultural, social, and behavioral factors) that influence population health and illness are explored including the contribution of these factors to health disparities. Population-focused initiatives for health promotion and disease prevention are examined within the context of local to global public health systems. Typically offered Fall Spring Summer.

NUR 22301 - Foundations Of Research And Evidence-Based Practice

Credit Hours: 4.00. Students gain foundational competencies for evidence-based practice (EBP), including computer literacy, information literacy, and professional communication. Students learn the principles of research process and identify strengths and limitations of research articles in relation to EBP in nursing and healthcare. Typically offered Fall Spring Summer.

Required Nursing Courses Level II (24 credits)

Minimum grade of C required in each course. Average GPA of this area must be 2.75 or better

NUR 31401 - Health Alterations In Adults I

Credit Hours: 6.00. One of two courses focusing on providing nursing care to adults with an emphasis on the application of the nursing process to assist diverse populations reach their optimal level of wellbeing as they experience health care across the delivery system continuum. Emphasis will be on promoting clinical reasoning skills, integrating best practices, and ensuring patient safety. The course concentrates on adults experiencing alterations in tissue integrity related to surgical interventions, cellular division, reproductive function, elimination, nutrition and sensoryfunction that typically result in hospitalization. Typically offered Fall Spring.

NUR 31501 - Nursing Of Childbearing Families

Credit Hours: 5.00. Promotes the development of nursing skills when caring for families and their newborns during uncomplicated and/or complicated childbearing experiences within a variety of clinical settings. Emphasizes the study and application of the nursing process, integrating evidence based practice while meeting the health and safety needs of diverse childbearing families. Typically offered Fall Spring.

NUR 31601 - Integration Seminar I

Credit Hours: 1.00. In this course, students will be challenged to identify appropriate nursing interventions for patients with a combination of medical and obstetrical diagnoses. Through the course activities the students will be challenged to look at healthcare from a patient perspective. Typically offered Fall Spring.

NUR 31701 - Health Alterations In Adults II

Credit Hours: 6.00. One of two courses focusing on providing nursing care to adults with an emphasis on the application of the nursing process to assist diverse populations reach their optimal level of wellbeing as they experience health care across the delivery system continuum. Emphasis will be on promoting clinical reasoning skills, integrating best practices, and ensuring patient safety. The course concentrates on adults experiencing alterations in health related to oxygenation, circulatory dynamics, endocrine regulation, neurological regulation, immune regulation and musculoskeletal dynamics that typically result in hospitalization. Typically offered Fall Spring.

NUR 31801 - Psychosocial Nursing

Credit Hours: 5.00. Focuses on providing nursing care that supports mental health and the care of persons with mental illness while providing a conceptual integration of the nursing process, theories, and research from the biopsychosocial sciences and humanities. Demonstrates the relevance of psychiatric-mental health nursing concepts to all areas of professional practice. Typically offered Fall Spring.

NUR 31901 - Integration Seminar II

Credit Hours: 1.00. In this course, students will be challenged to identify appropriate nursing interventions for patients with a combination of medical and psychiatric diagnoses. Through the course activities, the students will be challenged to look at healthcare from a patient perspective. Typically offered Fall Spring.

Required Nursing Courses Level III (19 credits)

Minimum grade of C required in each course. Average GPA of this area must be 2.75 or better

NUR 41401 - Pediatric Nursing

Credit Hours: 5.00. Explores factors influencing the health and wellness of children and families. Students will apply principles, concepts and research from the health and human sciences to the care of children and families across the health-illness continuum. A structured clinical component focuses on clinical reasoning and evidence based practice. Students will provide family centered care to healthy, at risk and ill children across a variety of clinical settings. Typically offered Fall Spring Summer.

NUR 41501 - Public Health Nursing

Credit Hours: 5.00. Utilize health promotion, maintenance, education and disease prevention in coordinating and providing population-focused care to individuals, families and aggregates in the community. A variety of clinical settings are used to offer students a broad, comprehensive perspective of public health nursing, a field that synthesizes content from nursing, social and public health sciences. Collaboration with the community and implementation of population-focused interventions foster critical thinking and independent decision making in the delivery of nursing care. Typically offered Fall Spring Summer.

NUR 41601 - Management Of Clients With Complex Health Issues

Credit Hours: 2.00. Focuses on nursing care of adults, children, and families with complex healthcare needs. Challenges students to use critical thinking and clinical reasoning to identify, prioritize, and evaluate nursing care interventions for clients with complex healthcare issues. Typically offered Fall Spring Summer.

NUR 41701 - Leadership In Nursing

Credit Hours: 3.00. Studies the components of nursing leadership and management functions with an emphasis on critical thinking, problem solving, communication, and team building within the context of experiential problem-based group projects. This course will provide specific practice and evaluation of strategic and financial planning, conflict management, delegation, and complex change. Competencies to be gained, at a novice level, include professional communication, sound ethical and legal judgments within personal and organizational frameworks, leadership skills in the management and evaluation of others, and an understanding of the drivers of healthcare change and finances. Typically offered Fall Spring Summer.

NUR 41801 - Clinical Capstone And Issues In Professional Practice

Credit Hours: 4.00. Promotes the use of critical thinking, clinical reasoning, and active learning to analyze contemporary issues related to professional nursing practice. Issues surrounding political action, socio-legal concerns, cultural diversity and ethics in nursing practice are used as a framework. A supportive and structured clinical component in a real-world setting encourages the learner to focus on refining clinical, leadership, and time-management skills in the delivery of care to diverse groups of clients across the lifespan. The clinical component assists the learner to transition from the role of students to novice nurse. Typically offered Fall Spring Summer.

Other Departmental Courses:

Nursing Selective Requirements (18 credits)

Minimum grade of C required in each course

- Humanities Selective - select from University list [Fulfills Humanities Core] - Credit Hours: 3.00
- Oral Communication Selective - select from University list [Fulfills Oral Communication Core] - Credit Hours: 3.00
- School of Nursing Guided Health & Human Sciences Selective - select from list below - Credit Hours: 3.00
- School of Nursing Guided Sociology Selective - select from list below - Credit Hours: 3.00
- School of Nursing Guided Statistics Selective - select from list below - Credit Hours: 3.00 (*IF STAT 11300 is selected, then the Science, Technology & Society Core requirement is fulfilled; if not, then Science, Technology & Society Core requirement must be taken as free elective.)
- [Quantitative Reasoning Core] - select from University list - Credit Hours: 3.00

Electives (2-3 credits)

(*Science, Technology & Society Core unless STAT 11300 was selected.)

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Guided Health & Human Sciences Selective List

ANTH 20500 - Human Cultural Diversity

Credit Hours: 3.00. Using concepts and models of cultural anthropology, this course will survey the principal cultural types of the world and their distribution, and will undertake a detailed analysis of societies representative of each type. Typically offered Fall Spring.

ANTH 34100 - Culture And Personality

Credit Hours: 3.00. A cross-cultural survey stressing different basic personality types and the processes by which adult personality is acquired. Case studies of selected non-Western cultures will be used to provide comparative perspective. Typically offered Fall Spring Summer.

EDPS 31600 - Collaborative Leadership: Cross-Cultural Settings

Credit Hours: 3.00. In this course, students will explore the cultural nuances of leadership in the United States as well as around the world. This course will include impact of globalism as a context for leadership, conflict resolution in a global environment, and other important factors that impact culturally diverse or global teams. Typically offered Fall Spring Summer.

HDFS 20100 - Introduction To Family Processes

Credit Hours: 3.00. An examination of the interpersonal processes that take place within family contexts. Emphasis is on family dynamics. Also considered are linkages between family processes and the broader social environment. Basic components of the research process will be introduced. Typically offered Fall Spring Summer.

HDFS 28000 - Diversity In Individual And Family Life

Credit Hours: 3.00. Students are introduced to aspects of individual and family life in diverse cultures, particularly racially and/or ethnically diverse families in the United States. The nature of relationships between dominant and minority cultures is considered. Implications of diversity for practice with diverse populations are emphasized throughout the course. Typically offered Fall Spring Summer.

HK 22600 - Contemporary Women's Health

Credit Hours: 3.00. Examines behavioral, psychological, and sociocultural aspects of women's experience in healthcare systems. Includes the influence of factors such as age, social class, and ethnicity on women's roles as recipients and providers of health care. Typically offered Fall Spring.

HK 23100 - Substance Abuse And Health

Credit Hours: 3.00. The study of drug abuse and drug education, including stimulants, depressants, psychedelics, and other drugs and harmful substances; beverage alcohol usage and health effects of tobacco smoking. Education materials and techniques are examined. Typically offered Summer Fall Spring.

HK 23300 - Stress And Human Health

Credit Hours: 3.00. Course is designed to provide an understanding of stress and stress management, including the physiology of the stress response, the relationship between stress and disease, potential sources of stress, and methods of intervening to prevent and/or relieve stress. Typically offered Summer Fall Spring.

PHIL 27000 - Biomedical Ethics

Credit Hours: 3.00. An examination of the moral problems raised by developments in medicine and the biomedical sciences. Topics include abortion, reproductive technologies, euthanasia and physician-assisted suicide, experiments involving human subjects, and health care delivery. Typically offered Fall Spring.

PSY 24000 - Introduction To Social Psychology

Credit Hours: 3.00. Not open to students with credit in SOC 34000. A broad survey in current knowledge about human social behavior. Topics covered include aggression, attraction and love, social influence, attitudes and attitude change, nonverbal communication, leadership, prejudice and discrimination, and application of social psychology to law, medicine, and other fields. Typically offered Fall Spring Summer. CTL:ISH 1024 Social Psychology

PSY 25100 - Health Psychology

Credit Hours: 3.00. Health psychology is concerned with the interaction between behavior and health and illness. It includes the psychological study of the relationship between health and lifestyle, stress and coping, and health-injurious behaviors. Typically offered Summer Fall Spring.

PSY 36700 - Adult Development And Aging

Credit Hours: 3.00. Theory and research on adult development from young adulthood through the elderly years. Course covers

biological, cognitive, personality, and social issues. Topics include vocational choice, marriage, parenthood, the empty nest, menopause, memory and aging, retirement, widowhood, longevity, and death and dying. Typically offered Fall Spring Summer.

- Any approved Study Abroad course

Guided Sociology Selective List

SOC 22000 - Social Problems

Credit Hours: 3.00. Contemporary problems at the community, society, and international levels, focusing on patterns of social organization and social change in American society, with concentration on such topics as technological militarism and war, poverty, racism, political protest, and cybernation. Typically offered Fall Spring Summer. CTL:ISH 1061 Social Problems

SOC 31000 - Racial And Ethnic Diversity

Credit Hours: 3.00. Examines racial and ethnic pluralism in America: ways groups have entered our society; their social and cultural characteristics; and their relationships with other groups. Groups include the English, Germans, Irish, Jews, Chinese, Japanese, Blacks, Hispanics, and Native Americans. Typically offered Fall.

SOC 34000 - General Social Psychology

Credit Hours: 3.00. Social influences on the individual and processes of social interaction. Individual attitudes and behavior as related to socialization, social norms, social roles, communication and propaganda, and other social influences. Among the interaction processes considered are interpersonal attraction, influence, leadership, cooperation, and conflict. Not open to students with credit in PSY 24000. Typically offered Summer Fall Spring.

SOC 37400 - Medical Sociology

Credit Hours: 3.00. Provides an overview of the sociological determinants and consequences of health, the patient experience, health care providers, the organization of the health care system. Typically offered Fall Spring.

SOC 41100 - Social Stratification

Credit Hours: 3.00. Examination of systems of class and caste, with special attention to the United States; status, occupation, income, and other elements in stratification. Typically offered Spring.

Guided Statistics Selective List

STAT 11300 - Statistics And Society

Credit Hours: 3.00. Introduction to statistical ideas and their impact on public policy and the sciences. Sample surveys, design of experiments, measurement, analysis of data, simulating probabilities, concepts of inference. Application to current issues and controversies. Not available for credit toward graduation in the School of Science. Typically offered Summer Fall Spring.

SOC 38200 - Introduction To Statistics In Sociology

Credit Hours: 3.00. Introduction to the basic techniques of statistical analysis applicable to sociological data. Elementary descriptive statistics and statistical inference. Introduction to multivariate analysis. Typically offered Fall Spring.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

PSY 20100 - Introduction To Statistics In Psychology

Credit Hours: 3.00. An introduction to the development and application of statistical, quantitative, and measurement techniques pertinent to the psychological sciences. Fundamental concepts of numerical assignment, sampling theory, distribution functions, experimental design, inferential procedures, and statistical control. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

Program Requirements

Fall 1st Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that

emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

HONR 19903 - Interdisciplinary Approaches In Writing

Credit Hours: 3.00. This course is a writing-intensive course in which students learn how to find, evaluate, and use credible information, how to express themselves well in a variety of different written genres, and how to write for different audiences. Typically offered Fall Spring.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HDFS 21000 - Introduction To Human Development

Credit Hours: 3.00. This course provides an introduction to the development of individuals from the prenatal period to adulthood and old age. Theories and research findings related to physical growth, cognitive and language development and social and emotional development will be discussed. Typically offered Fall Spring Summer. CTL: Developmental Psychology.

NUR 10800 - Introduction To Nursing

Credit Hours: 1.00. Introduce students entering the nursing profession to foundations of the baccalaureate nursing curriculum,

including concepts, competencies, mandatory requirements and responsibilities within the profession. Students are introduced to the rigor of the curriculum and begin to build a sense of community within the Purdue School of Nursing. Typically offered Fall.

15/14 Credits

Spring 1st Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

- Guided Sociology Selective - Credit Hours: 3.00
- Guided Statistics Selective - Credit Hours: 3.00 **

16 Credits

Fall 2nd Year

NUR 21801 - Health Assessment And Essentials Of Nursing Practice I

Credit Hours: 5.00. Focuses on the beginning concepts and principles for the professional nurse while developing fundamental skills in a nursing process framework. Through lecture and clinical learners begin to apply skills in communication and assessment. Emphasis is placed on developing physical examination skills, obtaining health histories and performing client

centered safe nursing care to meet basic healthcare needs in diverse populations across the lifespan. Typically offered Fall Spring Summer.

NUR 21901 - Pathopharmacology I

Credit Hours: 3.00. An introduction to the study of underlying changes in primary physiologic regulatory mechanisms affecting homeostasis, metabolic processes, immune response, circulation, renal elimination, fluid/electrolyte and acid/base balance, sensory perception and alteration in comfort and the pharmacotherapies utilized as treatment for alterations and disease states. This introductory knowledge provides the foundation for the understanding and practice of general nursing. Typically offered Fall Spring Summer.

NUR 22301 - Foundations Of Research And Evidence-Based Practice

Credit Hours: 4.00. Students gain foundational competencies for evidence-based practice (EBP), including computer literacy, information literacy, and professional communication. Students learn the principles of research process and identify strengths and limitations of research articles in relation to EBP in nursing and healthcare. Typically offered Fall Spring Summer.

PSY 35000 - Abnormal Psychology

Credit Hours: 3.00. Various forms of mental disorders from the standpoint of their origin, treatment, prevention, social significance, and relation to problems of normal human adjustment. Typically offered Fall Spring Summer. CTL:ISH 1023 Abnormal Psychology

15 Credits

Spring 2nd Year

NUR 22001 - Essentials Of Nursing Practice II

Credit Hours: 5.00. Continues to expand on the professional nursing role supported by fundamental concepts and principles of the nursing process in lecture and clinical settings. Learners apply communication, assessment and nursing skills while caring for the needs of clients in diverse populations across the lifespan. Typically offered Fall Spring Summer.

NUR 22101 - Pathopharmacology II

Credit Hours: 3.00. An introduction to the study of underlying changes in primary physiologic regulatory mechanisms affecting respiratory, hematologic, endocrine, neurologic, neuromuscular, gastrointestinal and reproductive function and the pharmacotherapies utilized as treatment for alterations and disease states. This course builds on the learning objectives from

Pathopharmacology I to provide the foundation for the understanding and practice of general nursing. Typically offered Fall Spring Summer.

NUR 22201 - Population Health

Credit Hours: 2.00. A comprehensive introduction to population health concepts and practices through examination of philosophy, purpose, functions, activities and tools. Multiple determinants (genetics, cultural, social, and behavioral factors) that influence population health and illness are explored including the contribution of these factors to health disparities. Population-focused initiatives for health promotion and disease prevention are examined within the context of local to global public health systems. Typically offered Fall Spring Summer.

NUTR 30300 - Essentials Of Nutrition

Credit Hours: 3.00. Basic nutrition and its application in meeting nutritional needs of all ages. Typically offered Fall Spring Summer. CTL:IHP 1402 Human Nutrition

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

17 Credits

Fall 3rd Year

NUR 31401 - Health Alterations In Adults I

Credit Hours: 6.00. One of two courses focusing on providing nursing care to adults with an emphasis on the application of the nursing process to assist diverse populations reach their optimal level of wellbeing as they experience health care across the delivery system continuum. Emphasis will be on promoting clinical reasoning skills, integrating best practices, and ensuring patient safety. The course concentrates on adults experiencing alterations in tissue integrity related to surgical interventions, cellular division, reproductive function, elimination, nutrition and sensoryfunction that typically result in hospitalization. Typically offered Fall Spring.

NUR 31501 - Nursing Of Childbearing Families

Credit Hours: 5.00. Promotes the development of nursing skills when caring for families and their newborns during uncomplicated and/or complicated childbearing experiences within a variety of clinical settings. Emphasizes the study and

application of the nursing process, integrating evidence based practice while meeting the health and safety needs of diverse childbearing families. Typically offered Fall Spring.

NUR 31601 - Integration Seminar I

Credit Hours: 1.00. In this course, students will be challenged to identify appropriate nursing interventions for patients with a combination of medical and obstetrical diagnoses. Through the course activities the students will be challenged to look at healthcare from a patient perspective. Typically offered Fall Spring.

- Oral Communications - Credit Hours: 3.00 *

15 Credits

Spring 3rd Year

NUR 31701 - Health Alterations In Adults II

Credit Hours: 6.00. One of two courses focusing on providing nursing care to adults with an emphasis on the application of the nursing process to assist diverse populations reach their optimal level of wellbeing as they experience health care across the delivery system continuum. Emphasis will be on promoting clinical reasoning skills, integrating best practices, and ensuring patient safety. The course concentrates on adults experiencing alterations in health related to oxygenation, circulatory dynamics, endocrine regulation, neurological regulation, immune regulation and musculoskeletal dynamics that typically result in hospitalization. Typically offered Fall Spring.

NUR 31801 - Psychosocial Nursing

Credit Hours: 5.00. Focuses on providing nursing care that supports mental health and the care of persons with mental illness while providing a conceptual integration of the nursing process, theories, and research from the biopsychosocial sciences and humanities. Demonstrates the relevance of psychiatric-mental health nursing concepts to all areas of professional practice. Typically offered Fall Spring.

NUR 31901 - Integration Seminar II

Credit Hours: 1.00. In this course, students will be challenged to identify appropriate nursing interventions for patients with a combination of medical and psychiatric diagnoses. Through the course activities, the students will be challenged to look at healthcare from a patient perspective. Typically offered Fall Spring.

12 Credits

Fall 4th Year

NUR 41601 - Management Of Clients With Complex Health Issues

Credit Hours: 2.00. Focuses on nursing care of adults, children, and families with complex healthcare needs. Challenges students to use critical thinking and clinical reasoning to identify, prioritize, and evaluate nursing care interventions for clients with complex healthcare issues. Typically offered Fall Spring Summer.

NUR 41701 - Leadership In Nursing

Credit Hours: 3.00. Studies the components of nursing leadership and management functions with an emphasis on critical thinking, problem solving, communication, and team building within the context of experiential problem-based group projects. This course will provide specific practice and evaluation of strategic and financial planning, conflict management, delegation, and complex change. Competencies to be gained, at a novice level, include professional communication, sound ethical and legal judgments within personal and organizational frameworks, leadership skills in the management and evaluation of others, and an understanding of the drivers of healthcare change and finances. Typically offered Fall Spring Summer.

NUR 41801 - Clinical Capstone And Issues In Professional Practice

Credit Hours: 4.00. Promotes the use of critical thinking, clinical reasoning, and active learning to analyze contemporary issues related to professional nursing practice. Issues surrounding political action, socio-legal concerns, cultural diversity and ethics in nursing practice are used as a framework. A supportive and structured clinical component in a real-world setting encourages the learner to focus on refining clinical, leadership, and time-management skills in the delivery of care to diverse groups of clients across the lifespan. The clinical component assists the learner to transition from the role of students to novice nurse. Typically offered Fall Spring Summer.

- Human Cultures: Humanities Selective - Credit Hours: 3.00 *
- Elective - Credit Hours: 2.00 - 3.00

14/15 Credits

Spring 4th Year

NUR 41401 - Pediatric Nursing

Credit Hours: 5.00. Explores factors influencing the health and wellness of children and families. Students will apply principles, concepts and research from the health and human sciences to the care of children and families across the health-illness continuum. A structured clinical component focuses on clinical reasoning and evidence based practice. Students will provide family centered care to healthy, at risk and ill children across a variety of clinical settings. Typically offered Fall Spring Summer.

NUR 41501 - Public Health Nursing

Credit Hours: 5.00. Utilize health promotion, maintenance, education and disease prevention in coordinating and providing population-focused care to individuals, families and aggregates in the community. A variety of clinical settings are used to offer students a broad, comprehensive perspective of public health nursing, a field that synthesizes content from nursing, social and public health sciences. Collaboration with the community and implementation of population-focused interventions foster critical thinking and independent decision making in the delivery of nursing care. Typically offered Fall Spring Summer.

- Guided Health & Human Sciences Selective - Credit Hours: 3.00
- Quantitative Reasoning Selective - Credit Hours: 3.00 *

16 Credits

Note

*Satisfies a University Foundational Learning Outcome

**If STAT 11300 selected satisfies a University Foundational Learning Outcome

Students must earn a "C" or higher in all required courses.

120 semester credits required for Bachelor of Science degree.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Department of Nutrition Science

About

Nutrition Science is a multidisciplinary science at the core of health, wellness, and quality of life. An education in Nutrition Science incorporates the human perspective to a foundation of strong basic sciences such as biochemistry, physiology, and statistics with experiential learning.

The department offers many opportunities for students to work and learn in a clinical research setting. With this kind of education and training, Purdue's Nutrition Science graduates are prepared to become the future leaders in nutrition and food science.

The Nutrition Science Freshman Guide to Success is a great resource to help new students adjust to campus life.

The department offers undergraduate study in the following areas:

- Dietetics
- Foods and Nutrition in Business
- Nutrition, Fitness, and Health
- Nutrition Science

The department also offers two undergraduate minors:

- Foods and Nutrition
- Nutrition

Faculty

<https://www.purdue.edu/hhs/nutr/directory/faculty/index.html>

Contact Information

Department of Nutrition Science
Stone Hall
700 W. State Street
West Lafayette, IN 47907
Phone: (765) 494-8228
Fax: (765) 494-0674

Graduate Information

For Graduate Information please see Nutrition Science Graduate Information.

Coordinated Program in Dietetics, BS

About the Program

Nutrition plays a vital role in health and disease. There is growing evidence of the role of diet in the prevention, development, and treatment of major diseases. To maximize one's health requires that professionals have a strong understanding of nutrition. The Registered Dietitian (RD)/Registered Dietitian Nutritionist (RDN) credential is the nationally recognized credential for nutritionists and is required for most employment in the healthcare industry and preferred for many other employment opportunities in foods and nutrition.

To become an RD you must complete a four-year academic program, a supervised practice experience, and then pass a national registration examination for dietitians (RD exam). Scores on the national RD exam by Purdue graduates are consistently above

the national average. Purdue offers two programs in dietetics. For more information about Dietetics and related programs, please visit <http://www.purdue.edu/hhs/nutr/students/undergraduate/majors/CPD.html>.

SDegree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Coordinated Program in Dietetics include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

NUTR SCI-BS

CRDT

132-140 credits

Major Requirements (126-134)

Application for admission to the CRDT occurs in the Fall of the final year of dietetics coursework. See the CRDT Handbook at www.purdue.edu/hhs/nutr/students/undergraduate/majors/CPD.html for admission and competency criteria:

An average GPA of 3.0/4.0 and minimum course grades in Dietetics Required Courses I, and an average GPA of 2.75/4.00 and minimum course grades in Dietetics Required Courses I and II are required.

Dietetics Required Courses I (35-41 credits)

C or better

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that

emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701= CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

NUTR 10600 - Introduction To The Profession Of Dietetics

Credit Hours: 1.00. Overview of the dietetics profession, including standards, ethics, educational and employment opportunities, and professional credentialing. Spring semester offered only through distance learning. Typically offered Fall Spring.

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

Dietetics Required Courses II (66-68 credits)

C or better

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HTM 31100 - Procurement Management For Foodservice

Credit Hours: 3.00. Identifies and describes food, supplies, and related merchandise used in the foodservice industry. Provides methods and criteria for recognizing quality, evaluating, specifying, purchasing, and inspecting these products. Discusses the use of technology in the purchasing component of the foodservice industry. Typically offered Fall Spring.

NUTR 12500 - Food Safety Certification

Credit Hours: 1.00. Training in ServSafe food safety certification program. Typically offered Fall Spring.

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 33200 - Nutrition Counseling

Credit Hours: 3.00. Develop communication skills and counseling techniques necessary to elicit nutrition-related behavior changes in individuals. Typically offered Spring.

NUTR 35000 - Dietetics Practicum In Quantity Food Production

Credit Hours: 1.00 to 3.00. Supervised on-the-job experience related to the food service management in health care facilities, schools, community programs, etc. Student is responsible for arrangement and approval of the experience through the supervising food service manager or dietitian and the course instructor. Permission of instructor required. Typically offered Fall Spring Summer.

HTM 29101 - Quantity Food Production And Service Laboratory

Credit Hours: 2.00. Basic knowledge of foodservice operations. Students learn and develop food production and service skills in the Boiler Bristo and the John Purdue Room. Students are exposed to quantity cooking methods, the use and care of equipment, and service techniques as they rotate through various positions commonly found in foodservice operations. All aspects of the dining experience are experienced by students. National Sanitation Certification needed. Typically offered Fall Spring.

NUTR 36500 - Physiology And Nutrition During The Life Cycle

Credit Hours: 3.00. Physiology and Nutrition During the Life Cycle explores the life stages of pregnancy, childhood, adulthood and older adulthood from physiological, social, and behavioral perspectives, focusing on the biological underpinnings of special nutritional needs for each life stage for optimal growth and development, maturation, aging, and overall health and well-being. Typically offered Spring.

NUTR 41100 - Dietetics Career Planning

Credit Hours: 1.00. This course will prepare students to successfully apply and interview for dietetics supervised practice experience, jobs and graduate programs. Typically offered Fall.

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

NUTR 43000 - Public Health Nutrition

Credit Hours: 2.00. Assessment of nutritional needs of the community and the programs that service these needs. Typically offered Spring.

NUTR 43600 - Nutritional Assessment

Credit Hours: 2.00. Nutrition assessment in humans, including anthropometric, biochemical, clinical, and dietary assessment. Typically offered Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

NUTR 44200 - Foodservice Systems Management

Credit Hours: 2.00. Systems approach to foodservice management. Foodservice operations based on nutritional goals of the target market. Food sanitation and safety, management of human resources, and supervision. Emphasis on applications to health-care facilities. Typically offered Spring.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

FS 45300 - Food Chemistry

Credit Hours: 3.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Spring.

NUTR 48000 - Medical Nutrition Therapy I

Credit Hours: 3.00. Nutrition assessment in humans and introduction to the nutrition care process. Application of the nutrition care process to various disease states. Typically offered Fall.

NUTR 48100 - Medical Nutrition Therapy II

Credit Hours: 3.00. Application of the Nutrition Care Process in various disease states and conditions to prepare students for supervised practice programs. Typically offered Spring.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

HTM 31200 - Human Resources Management For The Service Industries

Credit Hours: 3.00. The principles and practices of managing human resources for effective operations of hospitality and tourism businesses will be covered including: analysis and design of work, recruiting, selection, training and development, performance management, compensation, employee relations, and strategies for supporting organizational strategies. Typically offered Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Supervised Practice Courses (25 credits)

NUTR 42600 - Lab In Community Nutrition

Credit Hours: 3.00. Application of previous knowledge and communication skills in nutrition of community settings, such as school nutrition, health facilities, and federal or state nutrition programs. Typically offered Fall.

NUTR 44300 - Laboratory In Foodservice Systems Management

Credit Hours: 9.00. Application of previous knowledge and communication skills in foodservice facilities. Laboratory, student's performance will ultimately include responsibilities equivalent to staff relief. Typically offered Fall.

NUTR 46100 - Laboratory In Medical Nutrition Therapy

Credit Hours: 10.00. Application of previous knowledge and communication skills of medical nutrition therapy in the hospital/patient care setting to ultimately include responsibilities equivalent to staff relief. Typically offered Spring.

NUTR 46500 - Laboratory In Engagement

Credit Hours: 3.00. Culminating experiences in community nutrition, foodservice, medical nutrition therapy, public health, research and/or nutrition related business. Placements will be arranged based on individual student's preferred track in long-term care facilities, hospitals, public health or community agencies, and/or business and industry. Typically offered Spring.

Required Courses in Other Departments (6 credits)

- [Humanities Core] - select from University list (PHIL 11100 Ethics suggested) - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list - Credit Hours: 3.00

Electives (0 credits)

132-140 semester credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students

majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

NUTR 10600 - Introduction To The Profession Of Dietetics

Credit Hours: 1.00. Overview of the dietetics profession, including standards, ethics, educational and employment opportunities, and professional credentialing. Spring semester offered only through distance learning. Typically offered Fall Spring.

15-16 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

HTM 31200 - Human Resources Management For The Service Industries

Credit Hours: 3.00. The principles and practices of managing human resources for effective operations of hospitality and tourism businesses will be covered including: analysis and design of work, recruiting, selection, training and development, performance management, compensation, employee relations, and strategies for supporting organizational strategies. Typically offered Fall Spring.

16-18 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701= CTL:IPS 1723 Organic And Biochemistry w/lab

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

- Science, Tech, Society Selective - Credit Hours: 3.00 *
- Humanities Core - Credit Hours: 3.00 *

16-17 Credits

Spring 2nd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

13-14 Credits

Fall 3rd Year

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

NUTR 12500 - Food Safety Certification

Credit Hours: 1.00. Training in ServSafe food safety certification program. Typically offered Fall Spring.

12 Credits

Spring 3rd Year

HTM 31100 - Procurement Management For Foodservice

Credit Hours: 3.00. Identifies and describes food, supplies, and related merchandise used in the foodservice industry. Provides methods and criteria for recognizing quality, evaluating, specifying, purchasing, and inspecting these products. Discusses the use of technology in the purchasing component of the foodservice industry. Typically offered Fall Spring.

NUTR 33200 - Nutrition Counseling

Credit Hours: 3.00. Develop communication skills and counseling techniques necessary to elicit nutrition-related behavior changes in individuals. Typically offered Spring.

NUTR 36500 - Physiology And Nutrition During The Life Cycle

Credit Hours: 3.00. Physiology and Nutrition During the Life Cycle explores the life stages of pregnancy, childhood, adulthood and older adulthood from physiological, social, and behavioral perspectives, focusing on the biological underpinnings of special nutritional needs for each life stage for optimal growth and development, maturation, aging, and overall health and well-being. Typically offered Spring.

NUTR 43600 - Nutritional Assessment

Credit Hours: 2.00. Nutrition assessment in humans, including anthropometric, biochemical, clinical, and dietary assessment. Typically offered Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

14 Credits

Fall 4th Year

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

HTM 29101 - Quantity Food Production And Service Laboratory

Credit Hours: 2.00. Basic knowledge of foodservice operations. Students learn and develop food production and service skills in the Boiler Bristo and the John Purdue Room. Students are exposed to quantity cooking methods, the use and care of equipment, and service techniques as they rotate through various positions commonly found in foodservice operations. All aspects of the dining experience are experienced by students. National Sanitation Certification needed. Typically offered Fall Spring.

NUTR 35000 - Dietetics Practicum In Quantity Food Production

Credit Hours: 1.00 to 3.00. Supervised on-the-job experience related to the food service management in health care facilities, schools, community programs, etc. Student is responsible for arrangement and approval of the experience through the supervising food service manager or dietitian and the course instructor. Permission of instructor required. Typically offered Fall Spring Summer.

NUTR 41100 - Dietetics Career Planning

Credit Hours: 1.00. This course will prepare students to successfully apply and interview for dietetics supervised practice experience, jobs and graduate programs. Typically offered Fall.

NUTR 48000 - Medical Nutrition Therapy I

Credit Hours: 3.00. Nutrition assessment in humans and introduction to the nutrition care process. Application of the nutrition care process to various disease states. Typically offered Fall.

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

14-15 Credits

Spring 4th Year

NUTR 43000 - Public Health Nutrition

Credit Hours: 2.00. Assessment of nutritional needs of the community and the programs that service these needs. Typically offered Spring.

NUTR 44200 - Foodservice Systems Management

Credit Hours: 2.00. Systems approach to foodservice management. Foodservice operations based on nutritional goals of the target market. Food sanitation and safety, management of human resources, and supervision. Emphasis on applications to health-care facilities. Typically offered Spring.

NUTR 48100 - Medical Nutrition Therapy II

Credit Hours: 3.00. Application of the Nutrition Care Process in various disease states and conditions to prepare students for supervised practice programs. Typically offered Spring.

7 Credits

Fall 5th Year (Supervised Practice)

NUTR 42600 - Lab In Community Nutrition

Credit Hours: 3.00. Application of previous knowledge and communication skills in nutrition of community settings, such as school nutrition, health facilities, and federal or state nutrition programs. Typically offered Fall.

NUTR 44300 - Laboratory In Foodservice Systems Management

Credit Hours: 9.00. Application of previous knowledge and communication skills in foodservice facilities. Laboratory, student's performance will ultimately include responsibilities equivalent to staff relief. Typically offered Fall.

12 Credits

Spring 5th Year (Supervised Practice)

NUTR 46100 - Laboratory In Medical Nutrition Therapy

Credit Hours: 10.00. Application of previous knowledge and communication skills of medical nutrition therapy in the hospital/patient care setting to ultimately include responsibilities equivalent to staff relief. Typically offered Spring.

NUTR 46500 - Laboratory In Engagement

Credit Hours: 3.00. Culminating experiences in community nutrition, foodservice, medical nutrition therapy, public health, research and/or nutrition related business. Placements will be arranged based on individual student's preferred track in long-term care facilities, hospitals, public health or community agencies, and/or business and industry. Typically offered Spring.

13 Credits

Notes

*Satisfies a University Core Requirement

In Dietetics Required Courses I, students must earn a GPA of 3.0 and a "C" or better in all courses. In Dietetics Required Courses I and II, students must earn a GPA of 2.75 and a "C" or better in all courses except NUTR 43700 and NUTR 43800 where a "C-" or better is acceptable.

132-140 semester credits required for Bachelor of Science degree.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Didactic Program in Dietetics/Nutrition, Fitness and Health, BS

About the Program

Nutrition plays a vital role in health and disease. There is growing evidence of the role of diet in the prevention, development, and treatment of major diseases. To maximize one's health requires that professionals have a strong understanding of nutrition. The Registered Dietitian (RD)/Registered Dietitian Nutritionist (RDN) credential is the nationally recognized credential for nutritionists and is required for most employment in the healthcare industry and preferred for many other employment opportunities in foods and nutrition.

To become an RD you must complete a four-year academic program, a supervised practice experience, and then pass a national registration examination for dietitians (RD exam). Scores on the national RD exam by Purdue graduates are consistently above the national average. Purdue offers two programs in dietetics. For more information about Dietetics and related programs, please visit [here](#).

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Nutrition and Dietetics/Nutrition, Fitness, and Health include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

NUTR SCI-BS
DNFH (double major)
127-135 credits

Major Requirements (106-114 credits)

An average GPA of 3.0/4.0 and minimum course grades in Dietetics Required Courses I, and an average GPA of 2.75/4.00 and minimum course grades in Dietetics Required Courses I and II are required.

Dietetics Required Courses I: 35-41 credits

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701= CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure,

bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

NUTR 10600 - Introduction To The Profession Of Dietetics

Credit Hours: 1.00. Overview of the dietetics profession, including standards, ethics, educational and employment opportunities, and professional credentialing. Spring semester offered only through distance learning. Typically offered Fall Spring.

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

Dietetics Required Courses II: 66-68 credits

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HTM 31100 - Procurement Management For Foodservice

Credit Hours: 3.00. Identifies and describes food, supplies, and related merchandise used in the foodservice industry. Provides methods and criteria for recognizing quality, evaluating, specifying, purchasing, and inspecting these products. Discusses the use of technology in the purchasing component of the foodservice industry. Typically offered Fall Spring.

NUTR 12500 - Food Safety Certification

Credit Hours: 1.00. Training in ServSafe food safety certification program. Typically offered Fall Spring.

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 33200 - Nutrition Counseling

Credit Hours: 3.00. Develop communication skills and counseling techniques necessary to elicit nutrition-related behavior changes in individuals. Typically offered Spring.

NUTR 35000 - Dietetics Practicum In Quantity Food Production

Credit Hours: 1.00 to 3.00. Supervised on-the-job experience related to the food service management in health care facilities, schools, community programs, etc. Student is responsible for arrangement and approval of the experience through the supervising food service manager or dietitian and the course instructor. Permission of instructor required. Typically offered Fall Spring Summer.

HTM 29101 - Quantity Food Production And Service Laboratory

Credit Hours: 2.00. Basic knowledge of foodservice operations. Students learn and develop food production and service skills in the Boiler Bristo and the John Purdue Room. Students are exposed to quantity cooking methods, the use and care of equipment, and service techniques as they rotate through various positions commonly found in foodservice operations. All aspects of the dining experience are experienced by students. National Sanitation Certification needed. Typically offered Fall Spring.

NUTR 36500 - Physiology And Nutrition During The Life Cycle

Credit Hours: 3.00. Physiology and Nutrition During the Life Cycle explores the life stages of pregnancy, childhood, adulthood and older adulthood from physiological, social, and behavioral perspectives, focusing on the biological underpinnings of special nutritional needs for each life stage for optimal growth and development, maturation, aging, and overall health and well-being. Typically offered Spring.

NUTR 41100 - Dietetics Career Planning

Credit Hours: 1.00. This course will prepare students to successfully apply and interview for dietetics supervised practice experience, jobs and graduate programs. Typically offered Fall.

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

NUTR 43000 - Public Health Nutrition

Credit Hours: 2.00. Assessment of nutritional needs of the community and the programs that service these needs. Typically offered Spring.

NUTR 43600 - Nutritional Assessment

Credit Hours: 2.00. Nutrition assessment in humans, including anthropometric, biochemical, clinical, and dietary assessment. Typically offered Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

NUTR 44200 - Foodservice Systems Management

Credit Hours: 2.00. Systems approach to foodservice management. Foodservice operations based on nutritional goals of the target market. Food sanitation and safety, management of human resources, and supervision. Emphasis on applications to health-care facilities. Typically offered Spring.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

FS 45300 - Food Chemistry

Credit Hours: 3.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Spring.

NUTR 48000 - Medical Nutrition Therapy I

Credit Hours: 3.00. Nutrition assessment in humans and introduction to the nutrition care process. Application of the nutrition care process to various disease states. Typically offered Fall.

NUTR 48100 - Medical Nutrition Therapy II

Credit Hours: 3.00. Application of the Nutrition Care Process in various disease states and conditions to prepare students for supervised practice programs. Typically offered Spring.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

HTM 31200 - Human Resources Management For The Service Industries

Credit Hours: 3.00. The principles and practices of managing human resources for effective operations of hospitality and tourism businesses will be covered including: analysis and design of work, recruiting, selection, training and development, performance management, compensation, employee relations, and strategies for supporting organizational strategies. Typically offered Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Other Required NUTR courses: 5 credits

NUTR 41500 - Practicum In Nutrition, Fitness, And Health

Credit Hours: 2.00. Application of nutrition and exercise knowledge and skills by performing assessments, interpreting data, designing and implementing programs, documenting progress, and counseling of an adult client. Typically offered Fall Spring Summer.

NUTR 48800 - Topics In Nutrition, Fitness, And Health

Credit Hours: 3.00. This course critically evaluates the interrelationships between nutrition and exercise and their impact on physical performance and health. Concepts combining nutritional sciences and exercise physiology will be presented. Emerging science and controversies in the current literature will be discussed. Typically offered Fall Spring.

Required Courses in Other Departments (21 credits)

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

HK 42100 - Health Screening And Fitness Evaluation And Design

Credit Hours: 3.00. Health screening, fitness assessment and evaluation, and exercise prescription will be the primary focus of this course. The course will also qualify students to take the American College of Sports Medicine Health/Fitness Instructor exam. Typically offered Fall Spring.

HK 42200 - Basic Concepts In Exercise Program Design

Credit Hours: 3.00. Introduces basic program design concepts and rationale to design fitness programs for healthy adults emphasizing cardiovascular training, strength training, flexibility training, and balance. Typically offered Fall Spring.

HK 46800 - Advanced Exercise Physiology II

Credit Hours: 3.00. An advanced undergraduate course in the area of exercise and human performance. Further examination of the physiological mechanisms and theories involved in the exercise response. Typically offered Fall Spring.

HK 46900 - Exercise Testing And Prescription In Special Populations

Credit Hours: 3.00. Examines responses to exercise testing and prescription in healthy adults compared to exercise responses and special considerations for individuals with chronic diseases and conditions and issues of concern to pregnant women, children, and older adults, among others. Typically offered Fall Spring.

- [Humanities Core] - select from University list (PHIL 11100 - Ethics suggested) - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list - Credit Hours: 3.00

Electives 0 credits

127-135 semester credits required for Bachelor of Science degree for this double major

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

NUTR 10600 - Introduction To The Profession Of Dietetics

Credit Hours: 1.00. Overview of the dietetics profession, including standards, ethics, educational and employment opportunities, and professional credentialing. Spring semester offered only through distance learning. Typically offered Fall Spring.

15-16 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

HTM 31200 - Human Resources Management For The Service Industries

Credit Hours: 3.00. The principles and practices of managing human resources for effective operations of hospitality and tourism businesses will be covered including: analysis and design of work, recruiting, selection, training and development, performance management, compensation, employee relations, and strategies for supporting organizational strategies. Typically offered Fall Spring.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

16-18 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701= CTL:IPS 1723 Organic And Biochemistry w/lab

- Science, Technology, & Society Core - Credit Hours: 3.00 *
- Humanities Core - Credit Hours: 3.00 *

16-17 Credits

Spring 2nd Year

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

NUTR 12500 - Food Safety Certification

Credit Hours: 1.00. Training in ServSafe food safety certification program. Typically offered Fall Spring.

14-15 Credits

Fall 3rd Year

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also

will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

17 Credits

Spring 3rd Year

HK 42100 - Health Screening And Fitness Evaluation And Design

Credit Hours: 3.00. Health screening, fitness assessment and evaluation, and exercise prescription will be the primary focus of this course. The course will also qualify students to take the American College of Sports Medicine Health/Fitness Instructor exam. Typically offered Fall Spring.

HK 46800 - Advanced Exercise Physiology II

Credit Hours: 3.00. An advanced undergraduate course in the area of exercise and human performance. Further examination of the physiological mechanisms and theories involved in the exercise response. Typically offered Fall Spring.

NUTR 33200 - Nutrition Counseling

Credit Hours: 3.00. Develop communication skills and counseling techniques necessary to elicit nutrition-related behavior changes in individuals. Typically offered Spring.

NUTR 36500 - Physiology And Nutrition During The Life Cycle

Credit Hours: 3.00. Physiology and Nutrition During the Life Cycle explores the life stages of pregnancy, childhood, adulthood and older adulthood from physiological, social, and behavioral perspectives, focusing on the biological underpinnings of special nutritional needs for each life stage for optimal growth and development, maturation, aging, and overall health and well-being. Typically offered Spring.

NUTR 43600 - Nutritional Assessment

Credit Hours: 2.00. Nutrition assessment in humans, including anthropometric, biochemical, clinical, and dietary assessment. Typically offered Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

17 Credits

Fall 4th Year

HK 42200 - Basic Concepts In Exercise Program Design

Credit Hours: 3.00. Introduces basic program design concepts and rationale to design fitness programs for healthy adults emphasizing cardiovascular training, strength training, flexibility training, and balance. Typically offered Fall Spring.

HTM 31100 - Procurement Management For Foodservice

Credit Hours: 3.00. Identifies and describes food, supplies, and related merchandise used in the foodservice industry. Provides methods and criteria for recognizing quality, evaluating, specifying, purchasing, and inspecting these products. Discusses the use of technology in the purchasing component of the foodservice industry. Typically offered Fall Spring.

NUTR 35000 - Dietetics Practicum In Quantity Food Production

Credit Hours: 1.00 to 3.00. Supervised on-the-job experience related to the food service management in health care facilities, schools, community programs, etc. Student is responsible for arrangement and approval of the experience through the supervising food service manager or dietitian and the course instructor. Permission of instructor required. Typically offered Fall Spring Summer.

HTM 29101 - Quantity Food Production And Service Laboratory

Credit Hours: 2.00. Basic knowledge of foodservice operations. Students learn and develop food production and service skills in the Boiler Bristo and the John Purdue Room. Students are exposed to quantity cooking methods, the use and care of equipment, and service techniques as they rotate through various positions commonly found in foodservice operations. All aspects of the dining experience are experienced by students. National Sanitation Certification needed. Typically offered Fall Spring.

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

NUTR 41100 - Dietetics Career Planning

Credit Hours: 1.00. This course will prepare students to successfully apply and interview for dietetics supervised practice experience, jobs and graduate programs. Typically offered Fall.

NUTR 48000 - Medical Nutrition Therapy I

Credit Hours: 3.00. Nutrition assessment in humans and introduction to the nutrition care process. Application of the nutrition care process to various disease states. Typically offered Fall.

NUTR 48800 - Topics In Nutrition, Fitness, And Health

Credit Hours: 3.00. This course critically evaluates the interrelationships between nutrition and exercise and their impact on

physical performance and health. Concepts combining nutritional sciences and exercise physiology will be presented. Emerging science and controversies in the current literature will be discussed. Typically offered Fall Spring.

17-18 Credits

Spring 4th Year

HK 46900 - Exercise Testing And Prescription In Special Populations

Credit Hours: 3.00. Examines responses to exercise testing and prescription in healthy adults compared to exercise responses and special considerations for individuals with chronic diseases and conditions and issues of concern to pregnant women, children, and older adults, among others. Typically offered Fall Spring.

NUTR 41500 - Practicum In Nutrition, Fitness, And Health

Credit Hours: 2.00. Application of nutrition and exercise knowledge and skills by performing assessments, interpreting data, designing and implementing programs, documenting progress, and counseling of an adult client. Typically offered Fall Spring Summer.

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

NUTR 43000 - Public Health Nutrition

Credit Hours: 2.00. Assessment of nutritional needs of the community and the programs that service these needs. Typically offered Spring.

NUTR 44200 - Foodservice Systems Management

Credit Hours: 2.00. Systems approach to foodservice management. Foodservice operations based on nutritional goals of the target market. Food sanitation and safety, management of human resources, and supervision. Emphasis on applications to health-care facilities. Typically offered Spring.

NUTR 48100 - Medical Nutrition Therapy II

Credit Hours: 3.00. Application of the Nutrition Care Process in various disease states and conditions to prepare students for supervised practice programs. Typically offered Spring.

15 Credits

Notes

*Satisfies a University Core Requirement

In Dietetics Required Courses I, students must earn a GPA of 3.0 and a "C" or better in all courses.

In Dietetics Required Courses I and II, students must earn a GPA of 2.75 and a "C" or better in all courses except NUTR 43700 and NUTR 43800 where a "C-" or better is acceptable.

127-135 semester credits required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Foods and Nutrition in Business, BS

About the Program

If you possess a flair for food and the ability to communicate effectively, then the foods and nutrition in business major could be for you. This major helps bridge the gap between industry and the consumer, and prepares you for a marketing/sales career within the food industry. Upon successful completion of the program, you will earn a Bachelor of Science degree. For more information, please visit <http://www.purdue.edu/hhs/nutr/students/undergraduate/majors/FNBS.html>.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Foods and Nutrition in Business include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

NUTR SCI-BS
FNBS
120-132 credits

Major Requirements (24 credits)

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 37500 - Foods And Nutrition Internship

Credit Hours: 1.00 to 4.00. Food science or nutrition professionally related work experience in industry, institutions, or business. Permission of instructor required. Typically offered Summer Fall Spring.

NUTR 40000 - Executive In The Classroom

Credit Hours: 1.00. Lecture and discussion, featuring industrial and business executives in food-related areas. Emphasis is placed on careers in the food industry. Typically offered Fall.

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

NUTR 53400 - Human Sensory Systems And Food Evaluation

Credit Hours: 3.00. Overview of human chemosensory (taste, smell, chemesthetic) mechanisms and function, as well as procedural and statistical methods for evaluating the sensory responsiveness of people and the sensory properties of foods. Typically offered Spring.

Required Courses in Other Departments (95-108 credits)

AGEC 33100 - Principles Of Selling In Agricultural Business

Credit Hours: 3.00. The principles of salesmanship and their application to the agricultural business. Topics include attitudes and value systems, basic behavioral patterns, the purchase decision process, relationship of sales to marketing, selling strategies, preparing for sales calls, making sales presentations, handling objections, and closing sales. Emphasis is placed on application of principles to real-world situations and on building selling skills through class projects. Requires class trips. Students will pay individual lodging or meal expenses when necessary. Typically offered Fall Spring.

AGEC 42400 - Financial Management Of Agricultural Business

Credit Hours: 4.00. A study of the major types of financial decisions made by agriculturally related firms, including investment in inventory, receivables and cash, property, plant, and equipment; sources and types of short-term, intermediate, and long-term capital; legal patterns of the business organization, emphasis on implementation involving agribusiness case problems. Typically offered Fall Spring.

MGMT 31000 - Financial Management

Credit Hours: 3.00. Management of the financial affairs of the industrial enterprise. Working capital management, current asset management, capital budgeting, stock and bond valuation, and capital structure decisions. Typically offered Fall Spring Summer.

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

BCHM 56100 - General Biochemistry I

Credit Hours: 3.00. This course provides upper-division undergraduate and graduate students with basic understanding of biochemical and structural properties of amino acids, nucleic acids, lipids, and carbohydrates. This course allows students to connect the relationship between structure and function of biomolecules. In addition, students learn to understand enzyme properties, enzyme mechanism of action, and enzyme regulation. Typically offered Fall.

BCHM 56200 - General Biochemistry II

Credit Hours: 3.00. This course provides upper-division undergraduate and graduate students with an understanding of core metabolic pathways. Anabolic and catabolic processes of metabolic pathways are studied. Biochemical and structural knowledge is used to determine how enzymes and coenzymes are needed to regulate and control metabolic pathways. Typically offered Spring.

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in

agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of

microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also

will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

FS 34000 - Introduction To Food Law And Regulations

Credit Hours: 1.00. This course will cover basic knowledge and familiarity of the principal law and regulations governing raw and processed foods. Class meets during weeks 1-5. . Typically offered Spring.

FS 34100 - Food Processing I

Credit Hours: 2.00. Applications of the fundamentals of food engineering, microbiology, and chemistry to methods of food processing and preservation; emphasis will be on processing concepts, preparation for food processing, food formulation, and thermal processing. Typically offered Fall.

FS 34200 - Food Processing I Laboratory

Credit Hours: 1.00. This laboratory course applies food engineering principles and thermal processing methods for production of safe and high quality foods. The course will include applications of mathematics and physics principles in food processing operations, engineering problem solving exercises and laboratory demonstrations. Engineering concepts such as heat transfer, fluid flow, mass and energy balances applied to various food systems will be a major portion of this laboratory. Typically offered Fall.

FS 36200 - Food Microbiology

Credit Hours: 3.00. Microbiology of foods, with emphasis on the conditions for growth of microorganisms and degradation of food components, preservation methods, use of Hazard Analysis and Critical Control Point (HACCP) concepts, and microorganisms associated with foodborne illness, and modern detection methods. Typically offered Fall.

FS 36300 - Food Microbiology Laboratory

Credit Hours: 2.00. Classic and molecular methods for enumerating, isolating, and identifying spoilage, fermentative, and pathogenic food microorganisms in food systems. Typically offered Fall.

FS 44200 - Food Processing II

Credit Hours: 2.00. Study of food processing and preservation methods based on the integrated knowledge of microbiology, chemistry, and food engineering; emphasis will be on temperature reduction, water activity, concentration, dehydration, irradiation, and extrusion. Typically offered Fall.

FS 44300 - Food Product Design (Capstone)

Credit Hours: 3.00. Teams develop a new product from concept through marketing. Final case study defense is presented to faculty and peers. Classes include guest lectures from the food industry. Typically offered Spring.

FS 44700 - Food Processing II Laboratory

Credit Hours: 1.00. This lab is designed to build upon fundamental concepts associated with the preservation and processing of various food products. Concepts to be covered include water activity, dehydration (drum, spray and freeze drying), frying, high pressure, microwave and ohmic heating. The focus of this lab will be hands-on production of various food products and the demonstration of fundamental food processing unit operations and calculations related to each preservation method. Typically offered Fall.

HTM 19100 - Sanitation And Health In Foodservice, Lodging, And Tourism

Credit Hours: 3.00. This course introduces students to the foodservice component of the Hospitality and Tourism industry and

explores food safety and other health related issues. Application of sanitation principles in restaurants, hospitals, schools, hotels, cruise ships, airlines, and international travel are covered. Students must pass a National Sanitation Certification Examination to receive credit. Typically offered Fall Spring.

FS 36100 - Food Plant Sanitation

Credit Hours: 1.00. Relation of food-plant sanitation to good manufacturing practices and regulations affecting sanitation; organization of a food-plant sanitation program; sanitary building and equipment construction; selection of cleaning, sanitizing, and pesticidal compounds; water, air, and waste treatment; food storage and transportation. Typically offered Fall.

FS 44400 - Statistical Process Control

Credit Hours: 1.00. Basic concepts and techniques of solving quality problems and assuring the quality of production processes; emphasis is on quality improvement programs, problem-solving tools, control charts for variables and attributes, process capability analysis, and sampling methods. Course meets during weeks 6-10. Typically offered Fall.

MA 16100 - Plane Analytic Geometry And Calculus I

Credit Hours: 5.00. Introduction to differential and integral calculus of one variable, with applications. Some schools or departments may allow only 4 credit hours toward graduation for this course. Designed for students who have not had at least a one-semester calculus course in high school, with a grade of "A" or "B". Not open to students with credit in MA 16500. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring Summer.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

MGMT 20000 - Introductory Accounting

Credit Hours: 3.00. The objectives of the course are to help students: (1) understand what is in financial statements and what the statements say about a business, (2) identify the business activities that caused the amounts that appear in the statements, and (3)

understand how, when, and at what amount the effects of manager and employee actions will appear in the statements. Typically offered Fall Spring Summer. CTL:IPO 1801 Accounting I

MGMT 20100 - Management Accounting I

Credit Hours: 3.00. An introduction to management's internal use of accounting information--for decision making, production management, product costing, motivating and evaluating performance, and budgeting. Typically offered Fall Spring Summer. CCN:IPO 1802 Accounting II

MGMT 32300 - Principles Of Marketing

Credit Hours: 3.00. This mixed lecture and case course provides an overview of the functional area of marketing. The course is taught from a managerial perspective; it focuses on inputs to the marketing decision-making process, the process itself, and its results. No credit for students in the School of Management, except economics majors. Typically offered Fall Spring.

PHYS 22000 - General Physics

Credit Hours: 4.00. Mechanics, heat, and sound, for students not specializing in physics. Typically offered Fall Spring Summer. CTL:IPS 1751 Algebra-based Physics I

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT

30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- [Humanities Core] - select from University list (PHIL 11100 - Ethics suggested) - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list - Credit Hours: 3.00

Electives (0-1 credits)

120-132 semester credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in

agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

MA 16100 - Plane Analytic Geometry And Calculus I

Credit Hours: 5.00. Introduction to differential and integral calculus of one variable, with applications. Some schools or departments may allow only 4 credit hours toward graduation for this course. Designed for students who have not had at least a one-semester calculus course in high school, with a grade of "A" or "B". Not open to students with credit in MA 16500. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring Summer.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

14-17 Credits

Spring 1st Year

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

- Elective - Credit Hours: 0.00 - 1.00

13-16 Credits

Fall 2nd Year

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25701 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments designed to accompany CHM 25700 and to illustrate methods of separation, identification, and preparation of selected organic molecules. Typically offered Fall Spring. Both CHM 25700 + 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

- Humanities Core - Credit Hours: 3.00 *

15 Credits

Spring 2nd Year

PHYS 22000 - General Physics

Credit Hours: 4.00. Mechanics, heat, and sound, for students not specializing in physics. Typically offered Fall Spring Summer. CTL:IPS 1751 Algebra-based Physics I

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning

experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the

growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

ECON 25100 - Microeconomics

Credit Hours: 3.00. Microeconomics studies the choices individuals make and the incentives that influence those choices. Emphasis is on the incentives that determine market prices and resource allocation. The role of public policy in influencing incentives and efficiency is also addressed. Typically offered Fall Spring Summer. CTL:ISH 1042 Microeconomics

FS 34000 - Introduction To Food Law And Regulations

Credit Hours: 1.00. This course will cover basic knowledge and familiarity of the principal law and regulations governing raw and processed foods. Class meets during weeks 1-5. . Typically offered Spring.

15 Credits

Fall 3rd Year

FS 34100 - Food Processing I

Credit Hours: 2.00. Applications of the fundamentals of food engineering, microbiology, and chemistry to methods of food processing and preservation; emphasis will be on processing concepts, preparation for food processing, food formulation, and thermal processing. Typically offered Fall.

FS 34200 - Food Processing I Laboratory

Credit Hours: 1.00. This laboratory course applies food engineering principles and thermal processing methods for production of safe and high quality foods. The course will include applications of mathematics and physics principles in food processing operations, engineering problem solving exercises and laboratory demonstrations. Engineering concepts such as heat transfer, fluid flow, mass and energy balances applied to various food systems will be a major portion of this laboratory. Typically offered Fall.

FS 36200 - Food Microbiology

Credit Hours: 3.00. Microbiology of foods, with emphasis on the conditions for growth of microorganisms and degradation of food components, preservation methods, use of Hazard Analysis and Critical Control Point (HACCP) concepts, and microorganisms associated with foodborne illness, and modern detection methods. Typically offered Fall.

FS 36300 - Food Microbiology Laboratory

Credit Hours: 2.00. Classic and molecular methods for enumerating, isolating, and identifying spoilage, fermentative, and pathogenic food microorganisms in food systems. Typically offered Fall.

NUTR 40000 - Executive In The Classroom

Credit Hours: 1.00. Lecture and discussion, featuring industrial and business executives in food-related areas. Emphasis is placed on careers in the food industry. Typically offered Fall.

MGMT 20000 - Introductory Accounting

Credit Hours: 3.00. The objectives of the course are to help students: (1) understand what is in financial statements and what the statements say about a business, (2) identify the business activities that caused the amounts that appear in the statements, and (3) understand how, when, and at what amount the effects of manager and employee actions will appear in the statements. Typically offered Fall Spring Summer. CTL:IPO 1801 Accounting I

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

15-16 Credits

Spring 3rd Year

- Science, Technology, and Society Core - Credit Hours: 3.00 *

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

MGMT 20100 - Management Accounting I

Credit Hours: 3.00. An introduction to management's internal use of accounting information--for decision making, production management, product costing, motivating and evaluating performance, and budgeting. Typically offered Fall Spring Summer. CCN:IPO 1802 Accounting II

15-16 Credits

Fall 4th Year

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

FS 44200 - Food Processing II

Credit Hours: 2.00. Study of food processing and preservation methods based on the integrated knowledge of microbiology, chemistry, and food engineering; emphasis will be on temperature reduction, water activity, concentration, dehydration, irradiation, and extrusion. Typically offered Fall.

FS 44700 - Food Processing II Laboratory

Credit Hours: 1.00. This lab is designed to build upon fundamental concepts associated with the preservation and processing of various food products. Concepts to be covered include water activity, dehydration (drum, spray and freeze drying), frying, high pressure, microwave and ohmic heating. The focus of this lab will be hands-on production of various food products and the demonstration of fundamental food processing unit operations and calculations related to each preservation method. Typically offered Fall.

FS 36100 - Food Plant Sanitation

Credit Hours: 1.00. Relation of food-plant sanitation to good manufacturing practices and regulations affecting sanitation; organization of a food-plant sanitation program; sanitary building and equipment construction; selection of cleaning, sanitizing, and pesticidal compounds; water, air, and waste treatment; food storage and transportation. Typically offered Fall.

FS 44400 - Statistical Process Control

Credit Hours: 1.00. Basic concepts and techniques of solving quality problems and assuring the quality of production processes; emphasis is on quality improvement programs, problem-solving tools, control charts for variables and attributes, process capability analysis, and sampling methods. Course meets during weeks 6-10. Typically offered Fall.

HTM 19100 - Sanitation And Health In Foodservice, Lodging, And Tourism

Credit Hours: 3.00. This course introduces students to the foodservice component of the Hospitality and Tourism industry and explores food safety and other health related issues. Application of sanitation principles in restaurants, hospitals, schools, hotels, cruise ships, airlines, and international travel are covered. Students must pass a National Sanitation Certification Examination to receive credit. Typically offered Fall Spring.

15-16 Credits

Spring 4th Year

AGEC 33100 - Principles Of Selling In Agricultural Business

Credit Hours: 3.00. The principles of salesmanship and their application to the agricultural business. Topics include attitudes and value systems, basic behavioral patterns, the purchase decision process, relationship of sales to marketing, selling strategies, preparing for sales calls, making sales presentations, handling objections, and closing sales. Emphasis is placed on application of principles to real-world situations and on building selling skills through class projects. Requires class trips. Students will pay individual lodging or meal expenses when necessary. Typically offered Fall Spring.

FS 44300 - Food Product Design (Capstone)

Credit Hours: 3.00. Teams develop a new product from concept through marketing. Final case study defense is presented to faculty and peers. Classes include guest lectures from the food industry. Typically offered Spring.

AGEC 42400 - Financial Management Of Agricultural Business

Credit Hours: 4.00. A study of the major types of financial decisions made by agriculturally related firms, including investment in inventory, receivables and cash, property, plant, and equipment; sources and types of short-term, intermediate, and long-term capital; legal patterns of the business organization, emphasis on implementation involving agribusiness case problems. Typically offered Fall Spring.

MGMT 31000 - Financial Management

Credit Hours: 3.00. Management of the financial affairs of the industrial enterprise. Working capital management, current asset management, capital budgeting, stock and bond valuation, and capital structure decisions. Typically offered Fall Spring Summer.

MGMT 32300 - Principles Of Marketing

Credit Hours: 3.00. This mixed lecture and case course provides an overview of the functional area of marketing. The course is taught from a managerial perspective; it focuses on inputs to the marketing decision-making process, the process itself, and its results. No credit for students in the School of Management, except economics majors. Typically offered Fall Spring.

NUTR 53400 - Human Sensory Systems And Food Evaluation

Credit Hours: 3.00. Overview of human chemosensory (taste, smell, chemesthetic) mechanisms and function, as well as procedural and statistical methods for evaluating the sensory responsiveness of people and the sensory properties of foods. Typically offered Spring.

NUTR 37500 - Foods And Nutrition Internship

Credit Hours: 1.00 to 4.00. Food science or nutrition professionally related work experience in industry, institutions, or business. Permission of instructor required. Typically offered Summer Fall Spring.

18-19 Credits

Notes

*Satisfies a University Core Requirement

120-132 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Nutrition and Dietetics, BS

Nutrition plays a vital role in maintaining health and in the prevention and treatment diseases. Registered Dietitians (RD)s and Registered Dietary Nutritionists (RDN)s are the food and nutrition experts who translate the science of nutrition into personalized recommendations to help people prevent and manage medical conditions, such as diabetes, cancer, heart disease, and many more. To become a RD, students must complete required coursework as well as supervised practice. Required courses include biology, chemistry, biochemistry, medical nutrition therapy, nutrition assessment, diet selection and planning, and food service systems management.

At Purdue, students complete all required coursework for dietetics in the Didactic Program in Nutrition and Dietetics, and then apply to either an outside dietetics internship or the Coordinated Program in Dietetics at Purdue to complete the required supervised practice. Upon completion of supervised practice, students are eligible to sit for the national registration examination for dietitians.

With a focus on preventive health and nutrition, Dietetics is an excellent pre-professional major.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Nutrition and Dietetics include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

NUTR SCI-BS
DPND
120 credits

Major Requirements (101-109 credits)

Dietetics Required Courses I (35-41 credits)

C or better

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701 = CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models,

exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

NUTR 10600 - Introduction To The Profession Of Dietetics

Credit Hours: 1.00. Overview of the dietetics profession, including standards, ethics, educational and employment opportunities, and professional credentialing. Spring semester offered only through distance learning. Typically offered Fall Spring.

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

Dietetics Required Courses II (66-68 credits)

C or better

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HTM 31100 - Procurement Management For Foodservice

Credit Hours: 3.00. Identifies and describes food, supplies, and related merchandise used in the foodservice industry. Provides methods and criteria for recognizing quality, evaluating, specifying, purchasing, and inspecting these products. Discusses the use of technology in the purchasing component of the foodservice industry. Typically offered Fall Spring.

NUTR 12500 - Food Safety Certification

Credit Hours: 1.00. Training in ServSafe food safety certification program. Typically offered Fall Spring.

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 33200 - Nutrition Counseling

Credit Hours: 3.00. Develop communication skills and counseling techniques necessary to elicit nutrition-related behavior changes in individuals. Typically offered Spring.

NUTR 35000 - Dietetics Practicum In Quantity Food Production

Credit Hours: 1.00 to 3.00. Supervised on-the-job experience related to the food service management in health care facilities, schools, community programs, etc. Student is responsible for arrangement and approval of the experience through the supervising food service manager or dietitian and the course instructor. Permission of instructor required. Typically offered Fall Spring Summer.

HTM 29101 - Quantity Food Production And Service Laboratory

Credit Hours: 2.00. Basic knowledge of foodservice operations. Students learn and develop food production and service skills in the Boiler Bristo and the John Purdue Room. Students are exposed to quantity cooking methods, the use and care of equipment,

and service techniques as they rotate through various positions commonly found in foodservice operations. All aspects of the dining experience are experienced by students. National Sanitation Certification needed. Typically offered Fall Spring.

NUTR 36500 - Physiology And Nutrition During The Life Cycle

Credit Hours: 3.00. Physiology and Nutrition During the Life Cycle explores the life stages of pregnancy, childhood, adulthood and older adulthood from physiological, social, and behavioral perspectives, focusing on the biological underpinnings of special nutritional needs for each life stage for optimal growth and development, maturation, aging, and overall health and well-being. Typically offered Spring.

NUTR 41100 - Dietetics Career Planning

Credit Hours: 1.00. This course will prepare students to successfully apply and interview for dietetics supervised practice experience, jobs and graduate programs. Typically offered Fall.

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

NUTR 43000 - Public Health Nutrition

Credit Hours: 2.00. Assessment of nutritional needs of the community and the programs that service these needs. Typically offered Spring.

NUTR 43600 - Nutritional Assessment

Credit Hours: 2.00. Nutrition assessment in humans, including anthropometric, biochemical, clinical, and dietary assessment. Typically offered Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

NUTR 44200 - Foodservice Systems Management

Credit Hours: 2.00. Systems approach to foodservice management. Foodservice operations based on nutritional goals of the target market. Food sanitation and safety, management of human resources, and supervision. Emphasis on applications to health-care facilities. Typically offered Spring.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

FS 45300 - Food Chemistry

Credit Hours: 3.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Spring.

NUTR 48000 - Medical Nutrition Therapy I

Credit Hours: 3.00. Nutrition assessment in humans and introduction to the nutrition care process. Application of the nutrition care process to various disease states. Typically offered Fall.

NUTR 48100 - Medical Nutrition Therapy II

Credit Hours: 3.00. Application of the Nutrition Care Process in various disease states and conditions to prepare students for supervised practice programs. Typically offered Spring.

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

HTM 31200 - Human Resources Management For The Service Industries

Credit Hours: 3.00. The principles and practices of managing human resources for effective operations of hospitality and tourism businesses will be covered including: analysis and design of work, recruiting, selection, training and development, performance management, compensation, employee relations, and strategies for supporting organizational strategies. Typically offered Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

Required Courses in Other Departments (6 credits)

- [Humanities Core] - select from University list (PHIL 11100 Ethics suggested) - Credit Hours: 3.00
- [Science, Technology & Society Core] - select from University list - Credit Hours: 3.00

Electives (5-13 credits)

120 semester credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

Program Requirements

Fall 1st Year

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative

and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

NUTR 10600 - Introduction To The Profession Of Dietetics

Credit Hours: 1.00. Overview of the dietetics profession, including standards, ethics, educational and employment opportunities, and professional credentialing. Spring semester offered only through distance learning. Typically offered Fall Spring.

15-16 Credits

Spring 1st Year

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

OLS 25200 - Human Relations In Organizations

Credit Hours: 3.00. A survey of the concepts that provide a foundation for the understanding of individual and group behavior in organizations. Special emphasis on typical interpersonal and leadership relationships. Typically offered Fall Spring Summer.

HTM 31200 - Human Resources Management For The Service Industries

Credit Hours: 3.00. The principles and practices of managing human resources for effective operations of hospitality and tourism businesses will be covered including: analysis and design of work, recruiting, selection, training and development, performance management, compensation, employee relations, and strategies for supporting organizational strategies. Typically offered Fall Spring.

16-18 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701= CTL:IPS 1723 Organic And Biochemistry w/lab

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

- Science, Technology, & Society Core - Credit Hours: 3.00 *
- Humanities Core - Credit Hours: 3.00 *

16-17 Credits

Spring 2nd Year

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

BIOL 22100 - Introduction To Microbiology

Credit Hours: 4.00. The isolation, growth, structure, function, heredity, identification, classification, and ecology of microorganisms; their role in nature; and significance to man. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall Spring. CTL: Microbiology for the Health Sciences

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

NUTR 12500 - Food Safety Certification

Credit Hours: 1.00. Training in ServSafe food safety certification program. Typically offered Fall Spring.

14-15 Credits

Fall 3rd Year

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

- Elective - Credit Hour: 1.00 - 4.00

12-15 Credits

Spring 3rd Year

HTM 31100 - Procurement Management For Foodservice

Credit Hours: 3.00. Identifies and describes food, supplies, and related merchandise used in the foodservice industry. Provides methods and criteria for recognizing quality, evaluating, specifying, purchasing, and inspecting these products. Discusses the use of technology in the purchasing component of the foodservice industry. Typically offered Fall Spring.

NUTR 33200 - Nutrition Counseling

Credit Hours: 3.00. Develop communication skills and counseling techniques necessary to elicit nutrition-related behavior changes in individuals. Typically offered Spring.

NUTR 36500 - Physiology And Nutrition During The Life Cycle

Credit Hours: 3.00. Physiology and Nutrition During the Life Cycle explores the life stages of pregnancy, childhood, adulthood and older adulthood from physiological, social, and behavioral perspectives, focusing on the biological underpinnings of special nutritional needs for each life stage for optimal growth and development, maturation, aging, and overall health and well-being. Typically offered Spring.

NUTR 43600 - Nutritional Assessment

Credit Hours: 2.00. Nutrition assessment in humans, including anthropometric, biochemical, clinical, and dietary assessment. Typically offered Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

14 Credits

Fall 4th Year

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

NUTR 41100 - Dietetics Career Planning

Credit Hours: 1.00. This course will prepare students to successfully apply and interview for dietetics supervised practice experience, jobs and graduate programs. Typically offered Fall.

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

NUTR 48000 - Medical Nutrition Therapy I

Credit Hours: 3.00. Nutrition assessment in humans and introduction to the nutrition care process. Application of the nutrition care process to various disease states. Typically offered Fall.

- Electives - Credit Hours: 3.00 - 5.00

13-15 Credits

Spring 4th Year

- Electives - Credit Hours: 1.00 - 4.00

NUTR 43000 - Public Health Nutrition

Credit Hours: 2.00. Assessment of nutritional needs of the community and the programs that service these needs. Typically offered Spring.

NUTR 44200 - Foodservice Systems Management

Credit Hours: 2.00. Systems approach to foodservice management. Foodservice operations based on nutritional goals of the target market. Food sanitation and safety, management of human resources, and supervision. Emphasis on applications to health-care facilities. Typically offered Spring.

NUTR 48100 - Medical Nutrition Therapy II

Credit Hours: 3.00. Application of the Nutrition Care Process in various disease states and conditions to prepare students for supervised practice programs. Typically offered Spring.

NUTR 35000 - Dietetics Practicum In Quantity Food Production

Credit Hours: 1.00 to 3.00. Supervised on-the-job experience related to the food service management in health care facilities, schools, community programs, etc. Student is responsible for arrangement and approval of the experience through the supervising food service manager or dietitian and the course instructor. Permission of instructor required. Typically offered Fall Spring Summer.

HTM 29101 - Quantity Food Production And Service Laboratory

Credit Hours: 2.00. Basic knowledge of foodservice operations. Students learn and develop food production and service skills in the Boiler Bristo and the John Purdue Room. Students are exposed to quantity cooking methods, the use and care of equipment, and service techniques as they rotate through various positions commonly found in foodservice operations. All aspects of the dining experience are experienced by students. National Sanitation Certification needed. Typically offered Fall Spring.

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

12-16 Credits

Notes

*Satisfies a University Core Requirement

In Dietetics Required Courses I, students must earn a GPA of 3.0 and a "C" or better in all courses.

In Dietetics Required Courses I and II, students must earn a GPA of 2.75 and a "C" or better in all courses except NUTR 43700 and NUTR 43800 where a "C-" or better is acceptable.

120 semester credits required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Nutrition Science, BS

About the Program

The Nutrition Science major provides a foundation to pursue careers that improve lives, prevent diseases, promote health, and make a difference. What you eat not only has the ability to promote health, it also influences your risk of many diseases including cancer, diabetes, heart disease, osteoporosis, and obesity. Students who major in Nutrition Science develop a knowledge base in science and nutrition to understand and explore the relationship between what we eat and human health. Courses specific to this major emphasize the fundamentals of nutrition, the metabolism of nutrients in health and disease, and nutrition science research. For more information, please [click here](#).

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Nutrition Science include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

NUTR SCI-BS
NUSC
120 credits

Major Requirements (23-26 credits)

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

NUTR 10700 - Introduction To Nutrition Science

Credit Hours: 1.00. An overview of professional opportunities for nutrition scientists. Introduces tools and resources available for becoming a nutrition scientist. Typically offered in Fall.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

NUTR 36500 - Physiology And Nutrition During The Life Cycle

Credit Hours: 3.00. Physiology and Nutrition During the Life Cycle explores the life stages of pregnancy, childhood, adulthood and older adulthood from physiological, social, and behavioral perspectives, focusing on the biological underpinnings of special nutritional needs for each life stage for optimal growth and development, maturation, aging, and overall health and well-being. Typically offered Spring.

NUTR 43600 - Nutritional Assessment

Credit Hours: 2.00. Nutrition assessment in humans, including anthropometric, biochemical, clinical, and dietary assessment. Typically offered Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

NUTR 49000 - Independent Undergraduate Research

Credit Hours: 1.00 to 4.00. Independent research projects undertaken with faculty supervision. Permission of instructor required. Typically offered Fall Spring Summer.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

FS 45300 - Food Chemistry

Credit Hours: 3.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Spring.

NUTR 39700 - Directed Honors Research

Credit Hours: 1.00 to 3.00. Directed independent honors research for Honors College and Department of Nutrition Science Honors Program students. Students must select a faculty advisor for the course. Permission of instructor required. Typically offered Fall Spring Summer.

NUTR 49700 - Honors Research Project

Credit Hours: 1.00 to 4.00. The completion of the independent honors research project for Honors College and Department of Nutrition Science Honors Program students. Must have an approved Honors Project Proposal. Permission of instructor required. Typically offered Fall Spring Summer.

NUTR 49500 - Undergraduate Seminar In Foods And Nutrition

Credit Hours: 1.00. Instruction and application of concepts for effective oral presentations in the field of nutrition sciences. Typically offered Spring.

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

NUTR 49600 - Evaluation Of Nutrition Science Research

Credit Hours: 3.00. Evaluation of nutrition science research as it relates to health and disease. Typically offered Spring.

Required Courses in Other Departments (75-82 credits)

BCHM 56100 - General Biochemistry I

Credit Hours: 3.00. This course provides upper-division undergraduate and graduate students with basic understanding of biochemical and structural properties of amino acids, nucleic acids, lipids, and carbohydrates. This course allows students to connect the relationship between structure and function of biomolecules. In addition, students learn to understand enzyme properties, enzyme mechanism of action, and enzyme regulation. Typically offered Fall.

BCHM 56200 - General Biochemistry II

Credit Hours: 3.00. This course provides upper-division undergraduate and graduate students with an understanding of core metabolic pathways. Anabolic and catabolic processes of metabolic pathways are studied. Biochemical and structural knowledge is used to determine how enzymes and coenzymes are needed to regulate and control metabolic pathways. Typically offered Spring.

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

- BCHM 30900 - Biochemistry Laboratory and

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

BIOL 13100 - Biology II: Development, Structure, And Function Of Organisms

Credit Hours: 3.00. Principles of development of plants and animals and the relationship between the structure and function of selected systems of these organisms. Typically offered Spring.

BIOL 13500 - First year Biology Laboratory

Credit Hours: 2.00. Laboratory exercises emphasizing student mastery of basic laboratory skills needed to succeed in the biological sciences; intended for beginning (first-year) biology majors. Typically offered Fall Spring.

BIOL 23100 - Biology III: Cell Structure And Function

Credit Hours: 3.00. An introduction to modern cell biology through an examination of the physical and chemical properties that lead to an understanding of the molecular basis for cell function. Typically offered Fall.

BIOL 23200 - Laboratory In Biology III: Cell Structure And Function

Credit Hours: 2.00. Laboratory exercises designed to illustrate the properties, functions, and growth of prokaryotic and eukaryotic cells and to introduce the student to modern experimental methods used to study cells and their separated components. Typically offered Fall.

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

BIOL 24100 - Biology IV: Genetics And Molecular Biology

Credit Hours: 3.00. An introduction to the principles of classical genetics and to molecular genetics. Topics covered are transmission of the genetic material (both in eukaryotes and prokaryotes); changes in the genetic material, structure, and function of the genetic material; and the manipulation of genetic material (recombinant DNA technology). Typically offered Spring.

BIOL 24200 - Laboratory In Biology IV: Genetics And Molecular Biology

Credit Hours: 2.00. Experiments in classical and modern genetics and exercises to acquaint the students with basic techniques in molecular biology. Typically offered Spring.

AGRY 32000 - Genetics

Credit Hours: 3.00. The transmission of heritable traits; probability; genotypic-environmental interactions; chromosomal aberrations; polyploidy; gene mutations; genes in populations; the structure and function of nucleic acids; biochemical genetics; molecular genetics; coding. Typically offered Fall Spring.

AGRY 32100 - Genetics Laboratory

Credit Hours: 1.00. Experiments with plants and microorganisms to elucidate the basic concepts of molecular and classical genetics as applied to genome analysis. Typically offered Fall Spring.

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

- Select 3 credit course from ENGL 20000-49900 series

MA 16100 - Plane Analytic Geometry And Calculus I

Credit Hours: 5.00. Introduction to differential and integral calculus of one variable, with applications. Some schools or departments may allow only 4 credit hours toward graduation for this course. Designed for students who have not had at least a one-semester calculus course in high school, with a grade of "A" or "B". Not open to students with credit in MA 16500. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring Summer.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

PHYS 22000 - General Physics

Credit Hours: 4.00. Mechanics, heat, and sound, for students not specializing in physics. Typically offered Fall Spring Summer. CTL:IPS 1751 Algebra-based Physics I

PHYS 22100 - General Physics

Credit Hours: 4.00. Electricity, light, and modern physics, for students not specializing in physics. Typically offered Fall Spring Summer. CTL:IPS 1752 Algebra-based Physics II

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- Humanities Core - Credit Hours: 3.00 - *select from University list* (PHIL 11100 - Ethics suggested)
- Science, Technology & Society Core - Credit Hours: 3.00 - *select from University list*

Electives 12-22 credits

120 semester credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

MA 16100 - Plane Analytic Geometry And Calculus I

Credit Hours: 5.00. Introduction to differential and integral calculus of one variable, with applications. Some schools or departments may allow only 4 credit hours toward graduation for this course. Designed for students who have not had at least a one-semester calculus course in high school, with a grade of "A" or "B". Not open to students with credit in MA 16500. Demonstrated competence in college algebra and trigonometry. Typically offered Fall Spring Summer.

MA 16010 - Applied Calculus I

Credit Hours: 3.00. Topics include trigonometric and exponential functions; limits and differentiation, rules of differentiation, maxima, minima and optimization; curve sketching, integration, anti-derivatives, fundamental theorem of calculus. Properties of definite integrals and numerical methods. Applications to life, managerial and social sciences. Typically offered Fall Spring Summer.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

NUTR 10700 - Introduction To Nutrition Science

Credit Hours: 1.00. An overview of professional opportunities for nutrition scientists. Introduces tools and resources available for becoming a nutrition scientist. Typically offered in Fall.

16-19 credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

MA 16020 - Applied Calculus II

Credit Hours: 3.00. This course covers techniques of integration; infinite series, convergence tests; differentiation and integration of functions of several variables; maxima and minima, optimization; differential equations and initial value problems; matrices, determinants, eigenvalues and eigenvectors. Applications. Typically offered Fall Spring Summer.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

- Elective - Credit Hours: 1.00

12-15 Credits

Fall 2nd Year

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25501 - Organic Chemistry Laboratory

Credit Hours: 1.00. Laboratory experiments to accompany CHM 25500, illustrating methods of separation, instrumental methods of analysis, and the more common techniques and methods for preparing various types of organic compounds. Typically offered Fall Spring.

- Elective - Credit Hours: 2.00

12 Credits

Spring 2nd Year

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

BIOL 24100 - Biology IV: Genetics And Molecular Biology

Credit Hours: 3.00. An introduction to the principles of classical genetics and to molecular genetics. Topics covered are transmission of the genetic material (both in eukaryotes and prokaryotes); changes in the genetic material, structure, and function of the genetic material; and the manipulation of genetic material (recombinant DNA technology). Typically offered Spring.

AGRY 32000 - Genetics

Credit Hours: 3.00. The transmission of heritable traits; probability; genotypic-environmental interactions; chromosomal aberrations; polyploidy; gene mutations; genes in populations; the structure and function of nucleic acids; biochemical genetics; molecular genetics; coding. Typically offered Fall Spring.

BIOL 24200 - Laboratory In Biology IV: Genetics And Molecular Biology

Credit Hours: 2.00. Experiments in classical and modern genetics and exercises to acquaint the students with basic techniques in molecular biology. Typically offered Spring.

AGRY 32100 - Genetics Laboratory

Credit Hours: 1.00. Experiments with plants and microorganisms to elucidate the basic concepts of molecular and classical genetics as applied to genome analysis. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

CHM 25601 - Organic Chemistry Laboratory

Credit Hours: 1.00. A continuation of CHM 25501. Experiments are designed to illustrate principles discussed in CHM 25600. Typically offered Fall Spring.

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

14-15 Credits

Fall 3rd Year

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

PHYS 23300 - Physics For Life Sciences I

Credit Hours: 4.00. Physics For Life Sciences I builds upon prerequisite knowledge in college level biology, chemistry, and mathematics to present introductory physics that will be useful for applying physical principles, insights, and problem solving approaches for students with life science majors. Content will feature the Newtonian framework with emphasis on friction, drag and viscosity, random motion and diffusion, fluid flow, the Coulomb force, molecular forces and bonding, momentum, conservation of energy, entropy, and the first and second laws of thermodynamics. Typically offered Fall Spring Summer.

PHYS 22000 - General Physics

Credit Hours: 4.00. Mechanics, heat, and sound, for students not specializing in physics. Typically offered Fall Spring Summer. CTL:IPS 1751 Algebra-based Physics I

- Elective - Credit Hours: 3.00

14 Credits

Spring 3rd Year

NUTR 36500 - Physiology And Nutrition During The Life Cycle

Credit Hours: 3.00. Physiology and Nutrition During the Life Cycle explores the life stages of pregnancy, childhood, adulthood and older adulthood from physiological, social, and behavioral perspectives, focusing on the biological underpinnings of special nutritional needs for each life stage for optimal growth and development, maturation, aging, and overall health and well-being. Typically offered Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

NUTR 43600 - Nutritional Assessment

Credit Hours: 2.00. Nutrition assessment in humans, including anthropometric, biochemical, clinical, and dietary assessment. Typically offered Spring.

PHYS 23400 - Physics For Life Sciences II

Credit hours: 4.00. Physics For Life Sciences II builds upon prerequisite knowledge in college level biology, chemistry, and mathematics, as well as on Physics of Life Sciences I, to develop an understanding of how energy, entropy, enthalpy, and Boltzmann distributions affect the dynamics of living systems, of how electric fields and potentials are applied to fluids and membranes, and how the physics of harmonic oscillators, waves, sound, optics, photons, and quantized states are relevant to biological systems and the tools used for their study. Typically offered Fall Spring Summer.

PHYS 22100 - General Physics

Credit Hours: 4.00. Electricity, light, and modern physics, for students not specializing in physics. Typically offered Fall Spring Summer. CTL:IPS 1752 Algebra-based Physics II

- Elective - Credit Hours: 0.00 -3.00

15-18 Credits

Fall 4th Year

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

NUTR 49000 - Independent Undergraduate Research

Credit Hours: 1.00 to 4.00. Independent research projects undertaken with faculty supervision. Permission of instructor required. Typically offered Fall Spring Summer.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

NUTR 39700 - Directed Honors Research

Credit Hours: 1.00 to 3.00. Directed independent honors research for Honors College and Department of Nutrition Science Honors Program students. Students must select a faculty advisor for the course. Permission of instructor required. Typically offered Fall Spring Summer.

NUTR 49700 - Honors Research Project

Credit Hours: 1.00 to 4.00. The completion of the independent honors research project for Honors College and Department of Nutrition Science Honors Program students. Must have an approved Honors Project Proposal. Permission of instructor required. Typically offered Fall Spring Summer.

- Humanities Core* - Credit Hours: 3.00
- Science, Technology & Society Core* - Credit Hours: 3.00
- Electives - Credit Hours: 0.00 - 3.00

12-19 Credits

Spring 4th Year

- ENGL (20000-49900) - Credit Hours: 3.00

NUTR 49500 - Undergraduate Seminar In Foods And Nutrition

Credit Hours: 1.00. Instruction and application of concepts for effective oral presentations in the field of nutrition sciences. Typically offered Spring.

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

NUTR 49600 - Evaluation Of Nutrition Science Research

Credit Hours: 3.00. Evaluation of nutrition science research as it relates to health and disease. Typically offered Spring.

- Electives - Credit Hours: 6.00 - 7.00

13-16 Credits

Notes

*Satisfies a University Core Requirement

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Nutrition, Fitness, and Health, BS

About the Program

Eating right and exercising is not just a habit, it's your life philosophy. If you'd like to pass on your personal experiences with healthy living and help others make positive lifestyle changes, consider the nutrition, fitness, and health program.

Traditionally, professionals have been trained in only one discipline, but key components of fitness are both physical activity and nutrition. The nutrition, fitness, and health option is one of the few programs in the country that combines coursework in exercise physiology and health promotion with a science-based nutrition curriculum. Upon successful completion of the program, you will earn a Bachelor of Science degree. For more information, please visit <http://www.purdue.edu/hhs/nutr/students/undergraduate/majors/NFHL.html>.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Nutrition, Fitness, and Health include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

NUTR SCI-BS
NFHL
120 credits

Major Requirements (38 credits)

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 33200 - Nutrition Counseling

Credit Hours: 3.00. Develop communication skills and counseling techniques necessary to elicit nutrition-related behavior changes in individuals. Typically offered Spring.

NUTR 36500 - Physiology And Nutrition During The Life Cycle

Credit Hours: 3.00. Physiology and Nutrition During the Life Cycle explores the life stages of pregnancy, childhood, adulthood and older adulthood from physiological, social, and behavioral perspectives, focusing on the biological underpinnings of special nutritional needs for each life stage for optimal growth and development, maturation, aging, and overall health and well-being. Typically offered Spring.

NUTR 41500 - Practicum In Nutrition, Fitness, And Health

Credit Hours: 2.00. Application of nutrition and exercise knowledge and skills by performing assessments, interpreting data, designing and implementing programs, documenting progress, and counseling of an adult client. Typically offered Fall Spring Summer.

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

NUTR 43000 - Public Health Nutrition

Credit Hours: 2.00. Assessment of nutritional needs of the community and the programs that service these needs. Typically offered Spring.

NUTR 43600 - Nutritional Assessment

Credit Hours: 2.00. Nutrition assessment in humans, including anthropometric, biochemical, clinical, and dietary assessment. Typically offered Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

FS 45300 - Food Chemistry

Credit Hours: 3.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Spring.

NUTR 48800 - Topics In Nutrition, Fitness, And Health

Credit Hours: 3.00. This course critically evaluates the interrelationships between nutrition and exercise and their impact on physical performance and health. Concepts combining nutritional sciences and exercise physiology will be presented. Emerging science and controversies in the current literature will be discussed. Typically offered Fall Spring.

Required Courses in Other Departments (67-74 credits)

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for

biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701= CTL:IPS 1723 Organic And Biochemistry w/lab

CHM 25500 - Organic Chemistry

Credit Hours: 3.00. A study of aliphatic and aromatic hydrocarbons and their simple derivatives in terms of (a) structure, bonding, etc.; (b) general syntheses and reactions; and (c) a logical modern rationale for fundamental phenomena as supported by reactivity orders, orientation effects, stereochemistry, and relative rates. Recommended for biology majors. Typically offered Fall Spring.

CHM 25600 - Organic Chemistry

Credit Hours: 3.00. A continuation of CHM 25500 with various functional groups such as the carboxyl, amino, etc., and including such polyfunctional natural products as carbohydrates and peptides. Typically offered Fall Spring.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and

research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

HK 42100 - Health Screening And Fitness Evaluation And Design

Credit Hours: 3.00. Health screening, fitness assessment and evaluation, and exercise prescription will be the primary focus of this course. The course will also qualify students to take the American College of Sports Medicine Health/Fitness Instructor exam. Typically offered Fall Spring.

HK 42200 - Basic Concepts In Exercise Program Design

Credit Hours: 3.00. Introduces basic program design concepts and rationale to design fitness programs for healthy adults emphasizing cardiovascular training, strength training, flexibility training, and balance. Typically offered Fall Spring.

HK 46800 - Advanced Exercise Physiology II

Credit Hours: 3.00. An advanced undergraduate course in the area of exercise and human performance. Further examination of the physiological mechanisms and theories involved in the exercise response. Typically offered Fall Spring.

HK 46900 - Exercise Testing And Prescription In Special Populations

Credit Hours: 3.00. Examines responses to exercise testing and prescription in healthy adults compared to exercise responses and special considerations for individuals with chronic diseases and conditions and issues of concern to pregnant women, children, and older adults, among others. Typically offered Fall Spring.

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

- Humanities Core - *select from University list* (PHIL 11100 - Ethics suggested) - Credit Hours: 3.00
- Science, Technology & Society Core - *select from University list* - Credit Hours: 3.00

Electives 8-15 credits

120 credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

BIOL 11000 - Fundamentals Of Biology I

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Principles of biology, focusing on diversity, ecology, evolution, and the development, structure, and function of organisms. Typically offered Summer Fall Spring.

CHM 11100 - General Chemistry

Credit Hours: 3.00. Not available for credit toward graduation in the School of Science. Required of all freshmen in the School of Agriculture who are not in CHM 11500 and required of students in the School of Consumer and Family Sciences in retailing, textile, RHIT, and dietetics options who are not in CHM 11500. Required of students in physical therapy who are not in CHM 11500. Not available for credit toward graduation in the School of Science. Metric and S.I. Units; dimensional analysis; density; the atomic concept; elements, compounds, and mixtures; the mole concept; equations and stoichiometry; atomic structure, spectra; the periodic table; chemical bonding, gases; descriptive chemistry of the common elements. Prerequisite: two years of high school algebra. Typically offered Fall Spring.

CHM 11500 - General Chemistry

Credit Hours: 4.00. Stoichiometry; atomic structure; periodic properties; ionic and covalent bonding; molecular geometry; gases, liquids, and solids; crystal structure; thermochemistry; descriptive chemistry of metals and non-metals. Required of students majoring in science and students in engineering who are not in CHM 12300. One year of high school chemistry or one semester of college chemistry required. Typically offered Fall Spring Summer. CTL:IPS 1721 General Chemistry I w/lab

MA 15555 - Quantitative Reasoning

Credit Hours: 3.00. This course will cover important mathematical ideas, including proportion, weighted averages, linear models, exponential models, basic probability and statistics, and some algebra, by using concrete real-world problems. It will not be a prerequisite for any other mathematics course. Typically offered Fall Spring Summer.

COM 11400 - Fundamentals Of Speech Communication

Credit Hours: 3.00. A study of communication theories as applied to speech; practical communicative experiences ranging from interpersonal communication and small group process through problem identification and solution in discussion to informative and persuasive speaking in standard speaker-audience situations. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400. CTL:ICM 1103 Fundamentals Of Public Speaking

NUTR 10500 - Nutrition In The 21st Century

Credit Hours: 1.00. Overview of the discipline of nutrition science including undergraduate and professional opportunities, research and critical thinking requirements. Typically offered Fall.

14-15 Credits

Spring 1st Year

BIOL 11100 - Fundamentals Of Biology II

Credit Hours: 4.00. This course is designed primarily to provide an introduction to the principles of biology for students in agriculture and health sciences. Continuation of BIOL 11000. Principles of biology, focusing on cell structure and function, molecular biology, and genetics. Typically offered Fall Spring.

CHM 11200 - General Chemistry

Credit Hours: 3.00. Continuation of CHM 11100. Liquids and solids; solutions; chemical kinetics; equilibrium; acids and bases; oxidation and reduction; electrochemistry; descriptive chemistry of the metals and nonmetals; introduction to organic chemistry; nuclear chemistry. Not available for credit toward graduation in the School of Science. Typically offered Spring.

CHM 11600 - General Chemistry

Credit Hours: 4.00. A continuation of CHM 11500. Solutions; quantitative equilibria in aqueous solution; introductory thermodynamics; oxidation-reduction and electrochemistry; chemical kinetics; qualitative analysis; further descriptive chemistry of metals and nonmetals. Typically offered Fall Spring Summer. CTL:IPS 1722 General Chemistry II w/lab

STAT 30100 - Elementary Statistical Methods

Credit Hours: 3.00. Introduction to statistical methods with applications to diverse fields. Emphasis on understanding and interpreting standard techniques. Data analysis for one and several variables, design of samples and experiments, basic probability, sampling distributions, confidence intervals and significance tests for means and proportions, correlation and regression. Software is used throughout. For statistics majors and minors, credit should be allowed in no more than one of STAT 30100, 35000, 50100, and in no more than one of STAT 50300 and STAT 51100. Prerequisite: college algebra. Typically offered Summer Fall Spring.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and

research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

13-15 Credits

Fall 2nd Year

BIOL 20300 - Human Anatomy And Physiology

Credit Hours: 4.00. A survey of normal structure and function of the human organism. The human is treated as an open system with the capacity to transport material, transform energy, and maintain a homeostatic state. The capacities and limitations of the human to cope with changes in the environment are emphasized. All major systems of the human body and their functions are examined in relation to the living organism. Integrated into the study of the human organism are laboratory exercises that emphasize the essentials of human anatomy and physiology. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Fall.

BIOL 30100 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A study of human function, emphasizing physiology of body tissues and systems. Relevant aspects of anatomy and histology are also included. Use of examples from current medical practice encourages application of knowledge to predict symptoms of disease and rationale for treatment. Topics covered include histophysiology of cells and tissues, nerve and muscle physiology, the nervous system, and cardiovascular dynamics. Typically offered Fall.

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

CHM 25700 - Organic Chemistry

Credit Hours: 4.00. Introductory organic chemistry. Emphasis is on structure, nomenclature, reactions, and theory as applied to simple organic compounds. This course is designed for students who require a one semester overview in preparation for biochemistry. Not recommended for majors in the College of Science. Typically offered Fall Spring. Both CHM 25700 + CHM 25701= CTL:IPS 1723 Organic And Biochemistry w/lab

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

SOC 10000 - Introductory Sociology

Credit Hours: 3.00. A survey course designed to introduce the student to the scene of human society. Fundamental concepts, description, and analysis of society, culture, the socialization process, social institutions, and social change. Students of junior or senior standing should take SOC 31200, unless they are sociology or law and society majors. Typically offered Fall Spring Summer. CTL:ISH 1060 Introduction To Sociology

ECON 21000 - Principles Of Economics

Credit Hours: 3.00. Economics is the study of decision making under conditions of scarcity. This course looks at the behavior of the individual consumer and firm and their interaction with the government. The second half of the course studies the macroeconomy and focuses on the causes of inflation, unemployment, and interest rate changes. The international economy also will be studied. No credit for management students. Typically offered Fall Spring Summer. CTL:ISH 1040 Introduction To Economics

AGEC 21700 - Economics

Credit Hours: 3.00. National economic problems such as unemployment, recessions, inflation, taxation, bank interest rates, the growth of government, monetary systems, and a rising national debt are discussed along with the principles, policies, and institutions for solving these macroeconomic problems. Typically offered Fall Spring Summer.

16-17 Credits

Spring 2nd Year

BIOL 30200 - Human Design: Anatomy And Physiology

Credit Hours: 3.00. A continuation of BIOL 30100. (It is helpful but not essential for this course to be preceded by BIOL 30100.) Topics covered include body fluids and renal function, respiration, endocrine systems, the gastro-intestinal system, exercise physiology, reproduction, and immunity. Typically offered Spring.

BIOL 20400 - Human Anatomy And Physiology

Credit Hours: 4.00. Continuation of BIOL 20300. Not available for credit toward graduation for majors in the Department of Biological Sciences. Typically offered Spring.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

- Science, Technology & Society Core - Credit Hours: 3.00*
- Humanities Core - Credit Hours: 3.00*
- Elective - Credit Hours: 3.00

15-16 Credits

Fall 3rd Year

CHM 33300 - Principles Of Biochemistry

Credit Hours: 3.00. Structure and function of biologically important molecules. Intended for students in life sciences. Typically offered Fall Spring.

BCHM 30700 - Biochemistry

Credit Hours: 3.00. Students will have an understanding of the following content areas: structure/function of amino acids, carbohydrates, lipids and nucleic acids; protein structure, function and purification; basic enzymology; replication, transcription and translation; intermediary metabolism including glycolysis, the citric acid cycle, oxidative phosphorylation, photosynthesis. Students will also develop an appreciation for some of the contributions that have been made by biochemistry to society, including improvements to medicine, agriculture, and the economy. Typically offered Fall Spring Summer.

BCHM 30900 - Biochemistry Laboratory

Credit Hours: 1.00. Experiments that introduce methods for analysis and separation of biological molecules and that illustrate the biochemical and metabolic concepts covered in BCHM 30700. Typically offered Fall Spring.

HK 36800 - Exercise Physiology I

Credit Hours: 3.00. Physiological concepts and principles underlying human responses and adaptations to exercise stress. Included are selected methods and techniques of assessing physiological function in the laboratory setting. Typically offered Fall Spring Summer.

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

- Elective - Credit Hours: 0.00 - 2.00

14-16 Credits

Spring 3rd Year

HK 42100 - Health Screening And Fitness Evaluation And Design

Credit Hours: 3.00. Health screening, fitness assessment and evaluation, and exercise prescription will be the primary focus of this course. The course will also qualify students to take the American College of Sports Medicine Health/Fitness Instructor exam. Typically offered Fall Spring.

NUTR 33200 - Nutrition Counseling

Credit Hours: 3.00. Develop communication skills and counseling techniques necessary to elicit nutrition-related behavior changes in individuals. Typically offered Spring.

NUTR 36500 - Physiology And Nutrition During The Life Cycle

Credit Hours: 3.00. Physiology and Nutrition During the Life Cycle explores the life stages of pregnancy, childhood, adulthood and older adulthood from physiological, social, and behavioral perspectives, focusing on the biological underpinnings of special nutritional needs for each life stage for optimal growth and development, maturation, aging, and overall health and well-being. Typically offered Spring.

NUTR 43600 - Nutritional Assessment

Credit Hours: 2.00. Nutrition assessment in humans, including anthropometric, biochemical, clinical, and dietary assessment. Typically offered Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

- Elective - Credit Hours: 0.00 - 2.00

14-16 Credits

Fall 4th Year

HK 42200 - Basic Concepts In Exercise Program Design

Credit Hours: 3.00. Introduces basic program design concepts and rationale to design fitness programs for healthy adults emphasizing cardiovascular training, strength training, flexibility training, and balance. Typically offered Fall Spring.

HK 46800 - Advanced Exercise Physiology II

Credit Hours: 3.00. An advanced undergraduate course in the area of exercise and human performance. Further examination of the physiological mechanisms and theories involved in the exercise response. Typically offered Fall Spring.

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

NUTR 48800 - Topics In Nutrition, Fitness, And Health

Credit Hours: 3.00. This course critically evaluates the interrelationships between nutrition and exercise and their impact on physical performance and health. Concepts combining nutritional sciences and exercise physiology will be presented. Emerging science and controversies in the current literature will be discussed. Typically offered Fall Spring.

- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

HK 46900 - Exercise Testing And Prescription In Special Populations

Credit Hours: 3.00. Examines responses to exercise testing and prescription in healthy adults compared to exercise responses and special considerations for individuals with chronic diseases and conditions and issues of concern to pregnant women, children, and older adults, among others. Typically offered Fall Spring.

NUTR 41500 - Practicum In Nutrition, Fitness, And Health

Credit Hours: 2.00. Application of nutrition and exercise knowledge and skills by performing assessments, interpreting data, designing and implementing programs, documenting progress, and counseling of an adult client. Typically offered Fall Spring Summer.

NUTR 42400 - Communication Techniques In Foods And Nutrition

Credit Hours: 3.00. Communication of foods and nutrition information to lay and professional audiences through oral, written, and mass media channels. Typically offered Fall Spring.

NUTR 43000 - Public Health Nutrition

Credit Hours: 2.00. Assessment of nutritional needs of the community and the programs that service these needs. Typically offered Spring.

- Elective - Credit Hours: 2.00 - 5.00

12-16 Credits

Notes

*Satisfies a University Core Requirement

120 semester credits required for Bachelor of Science degree.
2.0 Graduation GPA required for Bachelor of Science degree.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Foods and Nutrition Minor

CODE: FNN

Minimum of 15 Credit Hours

The Foods and Nutrition minor provides coursework in nutrition science with an emphasis on food.

General Requirements for a minor

1. A grade of "C" or better must be earned in any course used to fulfill a minor. "C-" or below is not acceptable.
2. All pre-requisites for courses in the minors must be taken.

A. The following courses are required (6 credits)

NUTR 20500 - Food Science I

Credit Hours: 3.00. Chemical and physical composition of foods: their changes during processing, storage, and preparation. Typically offered Fall Spring Summer.

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

B. Select 3-4 of the following courses (9 credits)

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 43000 - Public Health Nutrition

Credit Hours: 2.00. Assessment of nutritional needs of the community and the programs that service these needs. Typically offered Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

NUTR 45300 - Food Chemistry

Credit Hours: 4.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Fall Spring.

FS 45300 - Food Chemistry

Credit Hours: 3.00. Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods. Typically offered Spring.

NUTR 53400 - Human Sensory Systems And Food Evaluation

Credit Hours: 3.00. Overview of human chemosensory (taste, smell, chemesthetic) mechanisms and function, as well as procedural and statistical methods for evaluating the sensory responsiveness of people and the sensory properties of foods. Typically offered Spring.

NUTR 54000 - Food Regulations

Credit Hours: 1.00. Federal, state, and international regulations pertaining to the quality, wholesomeness, nutrition, and safety of foods; discussion of current topics in food legislation. Typically offered spring semester of odd numbered years.

NUTR 39000 - Independent Undergraduate Research

Credit Hours: 1.00 to 3.00. Individual research projects undertaken with faculty supervision. Permission of instructor required. Typically offered Fall Spring Summer.

NUTR 49000 - Independent Undergraduate Research

Credit Hours: 1.00 to 4.00. Independent research projects undertaken with faculty supervision. Permission of instructor required. Typically offered Fall Spring Summer.

Nutrition Minor

CODE: NUTR

Minimum of 15 Credit Hours

The Nutrition minor provides coursework in nutrition science and health.

General Requirements for a minor

1. A grade of "C" or better must be earned in any course used to fulfill a minor. "C-" or below is not acceptable.
2. All pre-requisites for courses in the minors must be taken.

Students wishing to earn a minor in Nutrition must complete the following requirements

A. The following courses are required (9 credits)

NUTR 31500 - Fundamentals Of Nutrition

Credit Hours: 3.00. Basic principles of nutrition and their application in meeting nutritional needs during the life cycle. Typically offered Fall Spring.

NUTR 43700 - Macronutrient Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the macronutrients, carbohydrate, lipids and protein in humans integrating physiology, biochemistry, and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Spring Summer.

NUTR 43800 - Micronutrient And Phytochemical Metabolism In Human Health And Disease

Credit Hours: 3.00. Metabolism of the micronutrients and phytochemicals in humans integrating physiology, biochemistry and nutrition with a focus on maintaining optimal health and preventing disease. Typically offered Fall.

B. Select 2 -3 of the following courses (6 credits)

NUTR 33000 - Diet Selection And Planning

Credit Hours: 3.00. Diet selection for health maintenance in culturally diverse populations based on current dietary guides with utilization of the computer for diet evaluation. Typically offered Fall Summer.

NUTR 36500 - Physiology And Nutrition During The Life Cycle

Credit Hours: 3.00. Physiology and Nutrition During the Life Cycle explores the life stages of pregnancy, childhood, adulthood and older adulthood from physiological, social, and behavioral perspectives, focusing on the biological underpinnings of special nutritional needs for each life stage for optimal growth and development, maturation, aging, and overall health and well-being. Typically offered Spring.

NUTR 43000 - Public Health Nutrition

Credit Hours: 2.00. Assessment of nutritional needs of the community and the programs that service these needs. Typically offered Spring.

NUTR 39000 - Independent Undergraduate Research

Credit Hours: 1.00 to 3.00. Individual research projects undertaken with faculty supervision. Permission of instructor required. Typically offered Fall Spring Summer.

NUTR 49000 - Independent Undergraduate Research

Credit Hours: 1.00 to 4.00. Independent research projects undertaken with faculty supervision. Permission of instructor required. Typically offered Fall Spring Summer.

Department of Psychological Sciences

About

Psychology is the study of behavior and mental processes (thought) where the focus is on individuals. The word psychology comes from the Greek words "psyche" (mind) and "logos" (knowledge of). Psychology, as a recognized field of study, has only been around for a little over a hundred years, but people have had discussions of human behavior for centuries.

The Department of Psychological Sciences at Purdue is consistently among the top 50 psychology departments in the US (out of more than 300). The many professors you will have in class wear a number of different hats. They conduct and publish research that advances the field of psychology and train graduate students. They also teach more than 90% of our undergraduate classes, giving you the opportunity to learn from several of them during your time at Purdue.

With a bachelor's degree in psychology, your career opportunities will be many and varied. You could obtain advanced training in Psychology or seek a career in affiliated fields such as clinical social work, social work, mental health counseling, marriage & family therapy, or school counseling. Another option is to enroll in a graduate program in such fields as law, medicine, or business. Your knowledge of psychology will be invaluable in all these areas. You may also choose to take a job immediately after graduation, in diverse settings such as a hospital, group home, government agency, business or industry, applying your skills in areas such as personnel selection, advertising, consumer-product research, or public opinion polling. Because you will learn about many aspects of psychology while at Purdue, you will be well-prepared for many career opportunities.

Areas of Psychology

- Mental health, various forms of mental illness, and other facets of Clinical Psychology
- Perception, attention, memory, and other facets of Cognitive Psychology
- Infants' understanding, children's memory, thinking, and other facets of Developmental Psychology
- Employee selection, motivation, and other facets of Industrial / Organizational Psychology
- Learning & Memory in animals
- Arousal, brain functioning, and other facets of Behavioral Neuroscience
- Statistics, measurement of human characteristics, and other facets of Mathematical and Computational Cognitive Science
- Stereotyping, attitudes, relationships, social influence and other facets of Social Psychology

Faculty

<http://www.purdue.edu/hhs/psy/about/directory/faculty/index.php>

Contact Information

Psychological Sciences
Psychological Sciences Building
703 Third Street
West Lafayette, IN 47907
Phone: (765) 494-6061
Fax: (765) 496-1264

Graduate Information

For Graduate Information please see Psychological Sciences Graduate Program Information.

Brain and Behavioral Sciences, BS

About the Program

The Brain and Behavioral Sciences Major (BBS) is especially appropriate for students interested in the more science or math-oriented areas of psychology. This program is also popular with students who want careers in medicine.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Brain and Behavioral Sciences include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

PSYSCI-BS
BBS
120 credits

Major Requirements (50-54 credits)

A cumulative GPA of 2.3 is required for all PSY courses used to meet major (Areas A-C) requirements

A) Required Courses (9 credits)

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

PSY 20100 - Introduction To Statistics In Psychology

Credit Hours: 3.00. An introduction to the development and application of statistical, quantitative, and measurement techniques pertinent to the psychological sciences. Fundamental concepts of numerical assignment, sampling theory, distribution functions, experimental design, inferential procedures, and statistical control. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

PSY 20300 - Introduction To Research Methods In Psychology

Credit Hours: 3.00. The use of scientific method in psychology. Lecture covers principles of collecting and interpreting data, using examples of research from many areas of psychology. In the laboratory portion, the student uses many different techniques from various areas of psychology. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

B) Select two courses from each of the following groups (12 credits)

B1)

PSY 20000 - Introduction To Cognitive Psychology

Credit Hours: 3.00. A survey of psychology as the science of mental life, covering theories and research in perception, reading, attention, consciousness, imagery, memory and its improvement, problem solving, creativity, decision making, and artificial intelligence. Typically offered Summer Fall Spring.

PSY 20200 - Introduction To Quantitative Topics In Psychology

Credit Hours: 3.00. Continuation of PSY 20100. Fundamental concepts of test theory, introduction to applied psychological testing, the scaling of data, and an introduction to mathematical models of psychological phenomena. Typically offered Fall Spring.

PSY 22200 - Introduction To Behavioral Neuroscience

Credit Hours: 3.00. An introduction to how the nervous system controls behavior. Topics include evolution and comparative psychobiology, the neuroscience of sensation and perception, the neuroscience of motivation, neuropsychology, and cognitive neuroscience. Typically offered Fall Spring Summer.

PSY 31400 - Introduction To Learning

Credit Hours: 3.00. This course attempts to make clear the theoretical and practical implications of learning principles and findings. Various theories of learning are examined and the implications of these theories, and the learning approach generally, for a variety of practical problems are emphasized. Typically offered Summer Fall Spring.

B2)

PSY 23500 - Child Psychology

Credit Hours: 3.00. Not open to students with credit in PSY 36000. General principles of children's behavior and development, from conception to adolescence, including sensory and motor development, and basic psychological processes such as learning, motivation, and socialization. Typically offered Summer Fall Spring.

PSY 24000 - Introduction To Social Psychology

Credit Hours: 3.00. Not open to students with credit in SOC 34000. A broad survey in current knowledge about human social behavior. Topics covered include aggression, attraction and love, social influence, attitudes and attitude change, nonverbal communication, leadership, prejudice and discrimination, and application of social psychology to law, medicine, and other fields. Typically offered Fall Spring Summer. CTL:ISH 1024 Social Psychology

PSY 27200 - Introduction To Industrial-Organizational Psychology

Credit Hours: 3.00. Survey of psychological principles and research methods relevant to organizations and industry. Topics covered include research methodology, individual differences, personnel selection, performance measurement, training, motivation, job satisfaction, emotions, work stress, and leadership. Typically offered Fall Spring Summer.

PSY 35000 - Abnormal Psychology

Credit Hours: 3.00. Various forms of mental disorders from the standpoint of their origin, treatment, prevention, social significance, and relation to problems of normal human adjustment. Typically offered Fall Spring Summer. CTL:ISH 1023 Abnormal Psychology

C) Select five 3-credit courses from the Advanced Content List (15 credits)

- PSY - Credit Hours: 3.00
- PSY - Credit Hours: 3.00
- PSY - Credit Hours: 3.00
- PSY - Credit Hours: 3.00
- PSY - Credit Hours: 3.00

Advanced Content List

PSY 30600 - Understanding And Analyzing Experiments

Credit Hours: 3.00. This course is designed to strengthen skills for doing experimental research and is intended for students who plan to pursue graduate degrees. It covers methods and statistics in designing and analyzing experimental studies in psychological sciences that are typically required of first-year graduate students. The course also provides training in analyzing experiments using statistical software (SPSS). Permission of instructor required. Typically offered Fall Spring.

PSY 31000 - Sensory And Perceptual Processes

Credit Hours: 3.00. A survey of the study of psychological experiences caused by stimulation to the senses. Topics include theory and research in seeing, hearing, touching, smelling, and tasting as experienced by humans and other animals. Typically offered Summer Fall Spring.

PSY 31100 - Human Memory

Credit Hours: 3.00. A survey of theories and research about how humans remember information and why they often forget. Topics include research on amnesia, forgetting, and sensory memory systems as well as on practical issues such as how to improve memory. Typically offered Fall Spring.

PSY 32400 - Introduction Cognitive Neuroscience

Credit Hours: 3.00. Introduction to the neural bases of complex human mental abilities. Emphasis on integrating research from cognitive science, brain-scanning techniques, and the lesion technique. Topics include perception, attention, memory, language, motor control, planning/decision-making and consciousness. . Typically offered Fall Spring.

PSY 33300 - Motivation

Credit Hours: 3.00. A survey of current research and theory in motivation. The effects of both learned and unlearned motives on behavior are discussed. Examples of topics covered are: hunger, sex, aggression, pain, emotion, stress, frustration, conflict, and needs for achievement, affiliation, and power. Typically offered Summer Fall Spring.

PSY 40300 - Psycholinguistics

Credit Hours: 3.00. (PSY 40300) This course aims to introduce students to the current, research-based understanding of how different aspects of language (such as word perception, language acquisition, or speech production) are represented in the mind. In addition, it will introduce some of the research methods employed by language scientists for gaining insight into such a

representation. This course also aims to help students learn how to critically evaluate research data used to support various theories about psychological and neural foundations of language knowledge. Typically offered Fall.

PSY 40400 - Honors Research Seminar I

Credit Hours: 3.00. Part one of a research series aimed at providing a structured learning experience to help students develop the basic research skills needed in order to conduct psychological research. Students will be expected to develop a research plan to be completed in concert with PSY 40500. Permission of instructor required. Typically offered Spring.

PSY 40500 - Honors Research Seminar II

Credit Hours: 3.00. Part two of a research series aimed at providing a structured learning experience to help students develop the basic research skills needed in order to conduct psychological research. Students will be expected to develop a research plan to be completed in concert with PSY 40400. Permission of instructor required. Typically offered Fall.

PSY 42100 - Alcohol Use And Disorders

Credit Hours: 3.00. The goal of this course is to provide students with a broad understanding of the biological bases of alcohol abuse and alcoholism. The course will cover neuroanatomical, neurochemical and biological systems that regulate the biological and behavioral response to alcohol. Coverage will also include discussions of the role of environment, age, gender, among other factors that influence the response to alcohol and propensity toward abuse and addiction. The course will also cover the neuroscience of treatment and relapse. Typically offered Spring.

PSY 42200 - Genes and Behavior

Credit Hours: 3.00. An examination of genetic influences on behavior, including the mechanisms of genetic influence, methods of gene manipulation, and the role of genes in development and evolution. Genetic influences on mental illness, learning, memory, and intelligence are considered. Typically offered Fall Spring.

PSY 42800 - Drugs And Behavior

Credit Hours: 3.00. Discussion of the variety of drugs that affect the nervous system and behavior. Emphasis will be upon a discussion of the physiological and pharmacological bases for the use and misuse of drugs in our society. Typically offered Fall Spring.

PSY 42900 - Hormones And Behavior

Credit Hours: 3.00. Discussion of the mechanisms and effects of endocrine hormones and brain peptides on sexual differentiation, sexual behavior, learning, response to stress, maternal behavior, and weight regulation. Typically offered Fall Spring.

PSY 46400 - Research Ethics In Psychological Sciences

Credit Hours: 3.00. Research Ethics broadly refers to the application of everyday values, such as fairness, honesty, and objectivity to scientific research. This course is designed to provide broad coverage of the ethical standards that research scientists must follow and allow exploration of various real-world ethical issues in the psychological sciences. Typically offered Fall Spring.

PSY 48400 - The Psychology Of Consciousness

Credit Hours: 3.00. A survey of psychological experiments and theory in consciousness. An emphasis is placed on altered states of consciousness such as dreaming, hypnosis, drug-induced changes in consciousness, and meditation; and comparison with ordinary consciousness is made. Typically offered Fall Spring.

PSY 51200 - Neural Systems

Credit Hours: 3.00. (SLHS 50700, BIOL 56200) Background in cell biology, psychobiology, physiology, or anatomy is recommended. Overview of the structure and function of neural systems including those involved with motor, somatosensory, visual, auditory, learning, memory, and higher cortical processes. Molecular and cellular aspects of neural function are integrated with discussion of relevant neuroanatomy. Permission of instructor required. Typically offered Spring.

PSY 57700 - Human Factors In Engineering

Credit Hours: 3.00. (IE 57700) Survey of human factors in engineering, with particular reference to human functions in human-machine systems, and consideration of human abilities and limitations in relation to design of equipment and work environments. Primarily for engineers and other nonpsychology majors. Typically offered Fall Spring.

PSY 39000 - Research Experience In Psychology

Credit Hours: 1.00 to 3.00. Involvement in an ongoing research project in the Department of Psychological Sciences. Permission of instructor required. Typically offered Fall Spring Summer.

PSY 49800 - Senior Research

Credit Hours: 3.00. Student conducts and writes a report on an individual research project under the guidance of a faculty member. Permission of instructor required. Typically offered Summer Fall Spring.

Note

****Only one PSY 39000 or PSY 49800 course counts towards this requirement.**

D) Select two courses for a total of 5-9 credits from FOUNDATIONS in Natural Sciences, Mathematics & Information Technology List (5-9 credits)

Courses selected must be from two different groups. At least one course from Areas D or E must be a lab natural science course.

E) Select 9 credits from ADDITIONAL STUDY in Natural Sciences, Mathematics & Information Technology List (9 credits)

At least one course from Areas D or E must be a lab natural science course.

Required Courses in Other Departments (9-57 credits)

Cultural/International Diversity Selective (0-16 credits)

The Cultural/International Diversity requirement may be met by completing ONE of the four options listed below:

The Cultural/International Diversity Selective requirement may be waived for international students. See academic advisor for guidelines and approval

- Option 1: Proficiency through level IV in any one foreign language.
 - Foreign Language 10100 - Credit Hours: 3.00 - 4.00
 - Foreign Language 10200 - Credit Hours: 3.00 - 4.00
 - Foreign Language 20100 - Credit Hours: 3.00 - 4.00
 - Foreign Language 20200 - Credit Hours: 3.00 - 4.00

Select from American Sign Language, Arabic, Chinese, French, German, Greek, Hebrew, Italian, Latin, Japanese, Portuguese, Russian, or Spanish.

- Option 2: Proficiency through level III in any one foreign language AND a course from Cultural/International Diversity Selective list.
 - Foreign Language 10100 - Credit Hours: 3.00 - 4.00
 - Foreign Language 10200 - Credit Hours: 3.00 - 4.00
 - Foreign Language 20100 - Credit Hours: 3.00 - 4.00
 - Select a course from Cultural/International Diversity Selective list - Credit Hours: 3.00
- Option 3: Two courses in any one foreign language AND an approved study abroad experience of at least 6 weeks in duration, which
 - a) Must take place outside the United States
 - b) Have significant immersion in the local culture and language independent of any U.S.-based program in which the student may be participating.
 - Foreign Language 10100 - Credit Hours: 3.00 - 4.00
 - Foreign Language 10200 - Credit Hours: 3.00 - 4.00
 - Study Abroad Experience
- Option 4: An approved semester length (Fall/Spring) study abroad experience which satisfies the following criteria:
 - a) Must take place outside the United States
 - b) Have significant immersion in the local culture and language independent of any U.S.-based program in which the student may be participating.
 - Study Abroad Experience

Select from list for each

- Economics/Finance Selective - Credit Hours: 3.00
- Management & Leadership Selective (IF PSY 27200 is selected for BBS Major Area B, this requirement is fulfilled.) - Credit Hours: 0.00 - 3.00
- Social Ethics Selective (IF PSY 46400 is selected for BBS Major Area C, this requirement is fulfilled.) - Credit Hours: 0.00 - 3.00
- [Humanities Core] (IF a foreign language is chosen for Cultural/International Diversity Selective, this requirement is fulfilled.) - Credit Hours: 0.00 - 4.00
- [Information Literacy Core] (IF ENGL 10600 or 10800 is chosen for Written Communication core, this requirement is fulfilled.) - Credit Hours: 0.00 - 3.00
- [Oral Communication Core] (Recommend COM 11400 - Fundamentals Of Speech Communication) - Credit Hours: 3.00
- [Quantitative Reasoning Core] MA 15300 - Algebra And Trigonometry I OR higher from University list except MA 15555 (IF a Group 2 course is chosen for BBS Major Area D, this requirement is fulfilled.) - Credit Hours: 0.00 - 5.00
- [Science Core] (Recommend [S] course from Area D or E. IF a [S] course is selected for BBS Major Area D, this requirement is fulfilled.) - Credit Hours: 0.00 - 5.00
- [Science Core] (Recommend [S] course from Area D or E. IF a [S] course is chosen for BBS Major Area D or E, this requirement is fulfilled.) - Credit Hours: 0.00 - 5.00
- [Science, Technology & Society Core] (Recommend [STS] course from Area D or E. IF a [STS] course is chosen for BBS Major Area D or E, or for Social Ethics Selective, this requirement is fulfilled.) - Credit Hours: 0.00 - 3.00
- [Written Communication Core] (Recommend ENGL 10600 - First-Year Composition or ENGL 10800 - Accelerated First-Year Composition) - Credit Hours: 3.00 - 4.00

Note

Courses that fulfill Brain & Behavioral Sciences Core requirements may also be used to fulfill Selective requirements, if applicable.

Courses that fulfill major requirements (Areas A-C) may also be used to fulfill Selective requirements, if applicable.

Courses that fulfill major requirements (Areas A-E) may also be used to fulfill Core requirements.

Electives (9-61 credits)

At least 32 credits of coursework from Purdue University required at 300 level or higher

120 semester credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- Oral Communication Core - Credit Hours: 3.00
- Cultural/International Diversity Selective - Credit Hours: 3.00 **

MA 15300 - Algebra And Trigonometry I

Credit Hours: 3.00. Exponents and radicals; algebraic and fractional expressions. Equations and inequalities, systems of linear equations. Polynomial, exponential, and logarithmic functions. Not open to students with credit in MA 15900. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring Summer. CTL:IMA 1601 College Algebra

- Elective - Credit Hours: 2.00
- Information Literacy Core - Credit Hours: 1.00 (PSY 10000 recom)

15 Credits

Spring 1st Year

- BBS Area B2 - Credit Hours: 3.00
- Written Commun. Core - Credit Hours: 4.00 (ENGL 10600 recommended)
- Cultural/International Diversity Selective - Credit Hours: 3.00 **
- BBS Area E + Science Core - Credit Hours: 3.00 ***
- Elective - Credit Hours: 2.00

15 Credits

Fall 2nd Year

PSY 20100 - Introduction To Statistics In Psychology

Credit Hours: 3.00. An introduction to the development and application of statistical, quantitative, and measurement techniques pertinent to the psychological sciences. Fundamental concepts of numerical assignment, sampling theory, distribution functions, experimental design, inferential procedures, and statistical control. Should be taken at Purdue University, West Lafayette.

Typically offered Summer Fall Spring.

- BBS Area B1 - Credit Hours: 3.00
- BBS Area D - Credit Hours: 3.00 ****
- Cultural/International Diversity Selective - Credit Hours: 3.00 **
- Elective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

PSY 20300 - Introduction To Research Methods In Psychology

Credit Hours: 3.00. The use of scientific method in psychology. Lecture covers principles of collecting and interpreting data, using examples of research from many areas of psychology. In the laboratory portion, the student uses many different techniques from various areas of psychology. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

- BBS Area B1 - Credit Hours: 3.00
- BBS Area D - Credit Hours: 3.00 ****
- Cultural/International Diversity Selective - Credit Hours: 3.00 **
- Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- BBS Area B2 - Credit Hours: 3.00
- BBS Area C - Credit Hours: 3.00
- BBS Area E + Science, Tech, & Society Core*** - Credit Hours: 3.00
- Humanities Core**** - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- BBS Area C - Credit Hours: 3.00
- BBS Area C - Credit Hours: 3.00

- BBS Area E + Science Core - Credit Hours: 3.00 ***
- Social Ethics Selective - Credit Hours: 3.00 ****
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- BBS Area C - Credit Hours: 3.00
- BBS Area C - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- Economics/Finance Selective - Credit Hours: 3.00
- Management & Leadership Selective - Credit Hours: 3.00 ****
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Note

* Typical credits shown, but will vary with specific course selections; 120 total credits required. At least 32 of these credits must be courses taken at Purdue and numbered 30000 or higher.

** Depending on language placement and Option selected, requirement might require fewer than 4 semesters to complete, potentially creating opportunities for additional electives to be taken.

*** Assumes BBS Area E and Core requirement will be fulfilled with one appropriately selected course. Requirements can be separated, if student prefers.

****Includes course option that can cover two or more requirements concurrently.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Psychological Sciences, BS

About the Program

The **Psychological Sciences Major** provides a broad foundation in psychology, but also provides maximum flexibility in psychology course selection. Students learn about applied and basic aspects of psychology as well as have a chance to take advance courses that give an authentic experience in diverse areas of psychology. This major leaves plenty of space for additional courses in other areas of interest or even allows a minor or double major. This program is often chosen by students interested in careers as therapists or in other human services areas, or by students who plan careers that require only a Bachelor's degree.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Psychological Sciences include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

PSYSCI-BS
PSYS
120 credits

Major Requirements (36 credits)

A cumulative GPA of 2.3 is required for all PSY courses used to meet major (Areas A-C) requirements

A) Required Courses (9 credits)

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

PSY 20100 - Introduction To Statistics In Psychology

Credit Hours: 3.00. An introduction to the development and application of statistical, quantitative, and measurement techniques

pertinent to the psychological sciences. Fundamental concepts of numerical assignment, sampling theory, distribution functions, experimental design, inferential procedures, and statistical control. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

PSY 20300 - Introduction To Research Methods In Psychology

Credit Hours: 3.00. The use of scientific method in psychology. Lecture covers principles of collecting and interpreting data, using examples of research from many areas of psychology. In the laboratory portion, the student uses many different techniques from various areas of psychology. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

Note

*These courses must be taken at Purdue University-West Lafayette.

B) Select two courses from each of the following groups (12 credits)

B1

PSY 20000 - Introduction To Cognitive Psychology

Credit Hours: 3.00. A survey of psychology as the science of mental life, covering theories and research in perception, reading, attention, consciousness, imagery, memory and its improvement, problem solving, creativity, decision making, and artificial intelligence. Typically offered Summer Fall Spring.

PSY 20200 - Introduction To Quantitative Topics In Psychology

Credit Hours: 3.00. Continuation of PSY 20100. Fundamental concepts of test theory, introduction to applied psychological testing, the scaling of data, and an introduction to mathematical models of psychological phenomena. Typically offered Fall Spring.

PSY 22200 - Introduction To Behavioral Neuroscience

Credit Hours: 3.00. An introduction to how the nervous system controls behavior. Topics include evolution and comparative psychobiology, the neuroscience of sensation and perception, the neuroscience of motivation, neuropsychology, and cognitive neuroscience. Typically offered Fall Spring Summer.

PSY 31400 - Introduction To Learning

Credit Hours: 3.00. This course attempts to make clear the theoretical and practical implications of learning principles and findings. Various theories of learning are examined and the implications of these theories, and the learning approach generally, for a variety of practical problems are emphasized. Typically offered Summer Fall Spring.

B2

PSY 23500 - Child Psychology

Credit Hours: 3.00. Not open to students with credit in PSY 36000. General principles of children's behavior and development, from conception to adolescence, including sensory and motor development, and basic psychological processes such as learning, motivation, and socialization. Typically offered Summer Fall Spring.

PSY 24000 - Introduction To Social Psychology

Credit Hours: 3.00. Not open to students with credit in SOC 34000. A broad survey in current knowledge about human social behavior. Topics covered include aggression, attraction and love, social influence, attitudes and attitude change, nonverbal communication, leadership, prejudice and discrimination, and application of social psychology to law, medicine, and other fields. Typically offered Fall Spring Summer. CTL:ISH 1024 Social Psychology

PSY 27200 - Introduction To Industrial-Organizational Psychology

Credit Hours: 3.00. Survey of psychological principles and research methods relevant to organizations and industry. Topics covered include research methodology, individual differences, personnel selection, performance measurement, training, motivation, job satisfaction, emotions, work stress, and leadership. Typically offered Fall Spring Summer.

PSY 35000 - Abnormal Psychology

Credit Hours: 3.00. Various forms of mental disorders from the standpoint of their origin, treatment, prevention, social significance, and relation to problems of normal human adjustment. Typically offered Fall Spring Summer. CTL:ISH 1023 Abnormal Psychology

C) Select five additional 3-credit PSY courses numbered 30000-59900 (15 credits)

PSY 31400 & PSY 35000 may **NOT** be used to fulfill requirement. Only one of the following 3-credit courses may be used: (PSY courses in this section may also fulfill some Selective Requirements)

PSY 31900 - Research Methods In Infancy And Childhood

Credit Hours: 3.00. (SLHS 34500) This is a laboratory-based course that focuses on methods to test childhood cognitive and language development. As part of the course, students will be working in the Purdue University Infant Labs. Permission of instructor required. Typically offered Fall Spring.

PSY 39000 - Research Experience In Psychology

Credit Hours: 1.00 to 3.00. Involvement in an ongoing research project in the Department of Psychological Sciences. Permission of instructor required. Typically offered Fall Spring Summer.

PSY 39100 - Readings In Psychology

Credit Hours: 1.00 to 3.00. In-depth reading on a specific topic in psychology under the guidance of a faculty member, often in preparation for PSY 49800. Permission of instructor required. Typically offered Fall Spring Summer.

PSY 49200 - Internship In Psychology

Credit Hours: 3.00. Experiential, supervised training in various areas of psychology-related fields including human factors, human resources, mental health-related organizations, research labs, and supervised living institutions. Usually taken in junior or senior year. Permission of instructor required. Typically offered Fall Spring Summer.

PSY 49800 - Senior Research

Credit Hours: 3.00. Student conducts and writes a report on an individual research project under the guidance of a faculty member. Permission of instructor required. Typically offered Summer Fall Spring.

Required Courses in Other Departments (18-67 credits)

Cultural/International Diversity Selective (0 -16 credits) *

The Cultural/International Diversity requirement may be met by completing ONE of the following options:

Option 1. Proficiency through level IV in any one foreign language.

- 10100 - Credit Hours: 3.00 - 4.00
- 10200 - Credit Hours: 3.00 - 4.00
- 20100 - Credit Hours: 3.00 - 4.00
- 20200 - Credit Hours: 3.00 - 4.00

Option 2. Proficiency through level III in any one foreign language AND a course from Cultural/International Diversity Selective list.

- 10100 - Credit Hours: 3.00 - 4.00
- 10200 - Credit Hours: 3.00 - 4.00

- 20100 - Credit Hours: 3.00 - 4.00
- select a course from Cultural/International Diversity Selective list

Option 3. Two courses in any one foreign language AND an approved study abroad experience of at least 6 weeks in duration, which

a) Must take place outside the United States

b) Have significant immersion in the local culture and language independent of any U.S.-based program in which the student may be participating.

- 10100 - Credit Hours: 3.00 - 4.00
- 10200 - Credit Hours: 3.00 - 4.00
- Study Abroad Experience

Option 4. An approved semester length (Fall/Spring) study abroad experience

a) Must take place outside the United States

b) Have significant immersion in the local culture and language independent of any U.S.-based program in which the student may be participating.

- Study Abroad Experience

*The Cultural/International Diversity Selective requirement may be waived for international students. See academic advisor for guidelines and approval

Select from list for each

- Economics/Finance Selective - Credit Hours: 3.00
- Management & Leadership Selective (IF PSY 27200 is selected for PSYS Major Area B, this requirement is fulfilled.) - Credit Hours: 0.00 - 3.00
- Natural Sciences, Math & Information Technology Selective (NSM&IT) - select from Group 1 list (IF [S] course is chosen, one Science Core requirement will be fulfilled) - Credit Hours: 2.00 - 4.00*
- Natural Sciences, Math & Information Technology Selective (NSM&IT) - (IF [S] course is chosen, one Science Core requirement will be fulfilled) - Credit Hours: 2.00 - 5.00*
- Natural Sciences, Math & Information Technology Selective (NSM&IT) - Must have lab component unless one of the other NSM&IT courses selected has lab component (IF [STS] course is chosen, Science Technology & Society Core will be fulfilled) - Credit Hours: 1.00 - 5.00*
- Social Ethics Selective (IF PSY 46400 is chosen for PSYS Major Area C, this requirement is fulfilled.) - Credit Hours: 0.00 - 3.00
- [Humanities Core] (IF a foreign language is chosen for Cultural/International Diversity Selective, this requirement is fulfilled.) - Credit Hours: 0.00 - 4.00
- [Information Literacy Core] (IF ENGL 10600 or 10800 is chosen for Written Communication core, this requirement is fulfilled.) - Credit Hours: 0.00 - 3.00
- [Oral Communication Core] (Recommend COM 11400 - Fundamentals Of Speech Communication) - Credit Hours: 3.00
- [Quantitative Reasoning Core] MA 15300 OR higher from University list except MA 15555 (IF [QR] is chosen for NSM&IT selective, this requirement is fulfilled.) - Credit Hours: 0.00 - 5.00
- [Science Core] (IF [S] course is chosen for NSM&IT Selective Group 1, this requirement is fulfilled.) - Credit Hours: 0.00 - 5.00
- [Science Core] (IF [S] course is chosen for NSM&IT Selective, this requirement is fulfilled.) - Credit Hours: 0.00 - 4.00
- [Science, Technology & Society Core] (IF [STS] course is chosen for NSM&IT Selective, this requirement is fulfilled.) - Credit Hours: 0.00 - 3.00

- [Written Communication Core] (Recommend ENGL 10600 - First-Year Composition or ENGL 10800 - Accelerated First-Year Composition) - Credit Hours: 3.00 - 4.00

*NSM&IT Selectives must total 9 or more credits.

Note

Courses that fulfill Psychological Sciences Core requirements may also be used to fulfill Selective requirements, if applicable.

Courses that fulfill major requirements (Areas A-C) may also be used to fulfill Selective requirements, if applicable.

Electives (17-66 credits)

Note

At least 32 credits of coursework required at 30000 level or higher.

120 semester credits required for Bachelor of Science degree.

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

Program Requirements

Fall 1st Year

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020 Introduction To Psychology

- Oral Communication Core - Credit Hours: 3.00
- Cultural/International Diversity Selective - Credit Hours: 3.00 **

MA 15300 - Algebra And Trigonometry I

Credit Hours: 3.00. Exponents and radicals; algebraic and fractional expressions. Equations and inequalities, systems of linear equations. Polynomial, exponential, and logarithmic functions. Not open to students with credit in MA 15900. Not available for credit toward graduation in the School of Science. Typically offered Fall Spring Summer. CTL:IMA 1601 College Algebra

- Elective - Credit Hours: 2.00

- Info. Literacy Core (PSY 10000 recommended) - Credit Hour: 1.00

15 Credits

Spring 1st Year

- PSY Area B2 - Credit Hours: 3.00
- Written Com. Core (ENGL 10600 recom.) - Credit Hours: 4.00
- Cultural/International Diversity Selective - Credit Hours: 3.00 **
- Sci/Math/InfoTech Selective + Sci. Core - Credit Hours: 3.00 ***
- Elective - Credit Hours: 2.00

15 Credits

Fall 2nd Year

PSY 20100 - Introduction To Statistics In Psychology

Credit Hours: 3.00. An introduction to the development and application of statistical, quantitative, and measurement techniques pertinent to the psychological sciences. Fundamental concepts of numerical assignment, sampling theory, distribution functions, experimental design, inferential procedures, and statistical control. Should be taken at Purdue University, West Lafayette.

Typically offered Summer Fall Spring.

- PSY Area B1 - Credit Hours: 3.00
- Cultural/International Diversity Selective - Credit Hours: 3.00 **
- Sci/Math/InfoTech Selective + Science Core - Credit Hours: 3.00 ***
- Elective - Credit Hours: 3.00

15 Credits

Spring 2nd Year

PSY 20300 - Introduction To Research Methods In Psychology

Credit Hours: 3.00. The use of scientific method in psychology. Lecture covers principles of collecting and interpreting data, using examples of research from many areas of psychology. In the laboratory portion, the student uses many different techniques from various areas of psychology. Should be taken at Purdue University, West Lafayette. Typically offered Summer Fall Spring.

- PSY Area B2 - Credit Hours: 3.00
- Cultural/International Diversity Selective - Credit Hours: 3.00 **

- Humanities Core - Credit Hours: 3.00 ****
- Elective - Credit Hours: 3.00

15 Credits

Fall 3rd Year

- PSY Area B1 - Credit Hours: 3.00
- PSY Area C - Credit Hours: 3.00
- Sci/ Math/InfoTech Selective + STS Core - Credit Hours: 3.00 ***
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 3rd Year

- PSY Area C - Credit Hours: 3.00
- Economics/Finance Selective - Credit Hours: 3.00
- Social Ethics Selective - Credit Hours: 3.00 ****
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Fall 4th Year

- PSY Area C - Credit Hours: 3.00
- PSY Area C - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Spring 4th Year

- PSY Area C - Credit Hours: 3.00
- Management & Leadership Selective - Credit Hours: 3.00 ****
- Elective - Credit Hours: 3.00

- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15 Credits

Note

*Typical credits shown, but will vary with specific course selections; 120 total credits required. At least 32 of these credits must be courses taken at Purdue and numbered 30000 or higher.

**Depending on language placement and Option selected, requirement might require fewer than 4 semesters to complete, potentially creating opportunities for additional electives to be taken.

***Assumes Selective and Core requirement will be fulfilled with one appropriately selected course. Requirements can be separated, if student prefers.

****Includes course option that can cover two or more requirements concurrently.

STS = Science, Technology & Society

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Psychology Minor

College of Health and Human Sciences

Minor

PSY

15 Hours

A grade of "C-" or better must be earned in any course used to fulfill a minor requirement.*

All courses in Sections B and C require PSY 12000 as a prerequisite.

A. The following course is required (3 credits)

PSY 12000 - Elementary Psychology

Credit Hours: 3.00. Introduction to the fundamental principles of psychology, covering particularly the topics of personality, intelligence, emotion, abnormal behavior, attention, perception, learning, memory, and thinking. As part of their learning experience, students participate in psychological experiments. Typically offered Fall Spring Summer. CTL:ISH 1020
Introduction To Psychology

B. Select 1 of the following courses (3 credits)

PSY 20000 - Introduction To Cognitive Psychology

Credit Hours: 3.00. A survey of psychology as the science of mental life, covering theories and research in perception, reading, attention, consciousness, imagery, memory and its improvement, problem solving, creativity, decision making, and artificial intelligence. Typically offered Summer Fall Spring.

PSY 22200 - Introduction To Behavioral Neuroscience

Credit Hours: 3.00. An introduction to how the nervous system controls behavior. Topics include evolution and comparative psychobiology, the neuroscience of sensation and perception, the neuroscience of motivation, neuropsychology, and cognitive neuroscience. Typically offered Fall Spring Summer.

C. Select 1 of the following courses (3 credits)

PSY 23500 - Child Psychology

Credit Hours: 3.00. Not open to students with credit in PSY 36000. General principles of children's behavior and development, from conception to adolescence, including sensory and motor development, and basic psychological processes such as learning, motivation, and socialization. Typically offered Summer Fall Spring.

PSY 24000 - Introduction To Social Psychology

Credit Hours: 3.00. Not open to students with credit in SOC 34000. A broad survey in current knowledge about human social behavior. Topics covered include aggression, attraction and love, social influence, attitudes and attitude change, nonverbal communication, leadership, prejudice and discrimination, and application of social psychology to law, medicine, and other fields. Typically offered Fall Spring Summer. CTL:ISH 1024 Social Psychology

PSY 27200 - Introduction To Industrial-Organizational Psychology

Credit Hours: 3.00. Survey of psychological principles and research methods relevant to organizations and industry. Topics

covered include research methodology, individual differences, personnel selection, performance measurement, training, motivation, job satisfaction, emotions, work stress, and leadership. Typically offered Fall Spring Summer.

PSY 35000 - Abnormal Psychology

Credit Hours: 3.00. Various forms of mental disorders from the standpoint of their origin, treatment, prevention, social significance, and relation to problems of normal human adjustment. Typically offered Fall Spring Summer. CTL:ISH 1023
Abnormal Psychology

D. Select 2 additional psychology courses (6 credits)

Only one of the following 3-credit courses may be used to fulfill this requirement:

PSY 31900 - Research Methods In Infancy And Childhood

Credit Hours: 3.00. (SLHS 34500) This is a laboratory-based course that focuses on methods to test childhood cognitive and language development. As part of the course, students will be working in the Purdue University Infant Labs. Permission of instructor required. Typically offered Fall Spring.

PSY 39000 - Research Experience In Psychology

Credit Hours: 1.00 to 3.00. Involvement in an ongoing research project in the Department of Psychological Sciences. Permission of instructor required. Typically offered Fall Spring Summer.

PSY 39100 - Readings In Psychology

Credit Hours: 1.00 to 3.00. In-depth reading on a specific topic in psychology under the guidance of a faculty member, often in preparation for PSY 49800. Permission of instructor required. Typically offered Fall Spring Summer.

Note

* PSY 22000 (Brain & Behavior) cannot be used toward fulfillment of the minor requirements.

Department of Speech, Language, and Hearing Sciences

About Speech, Language, and Hearing Sciences

The Department of Speech, Language, and Hearing Sciences (SLHS) at Purdue University is in the College of Health and Human Sciences. Undergraduate majors in SLHS obtain a Bachelor of Science degree in Speech, Language, and Hearing Sciences. Courses at the undergraduate level are designed to introduce students to basic processes of communication, speech, language, and hearing, and to disorders of communication, and eligible students may also earn course credit working as research assistants under the supervision of department faculty. Students who qualify also have the opportunity to participate in clinical observation and a practicum during the latter stages of their program. Our undergraduate program provides a firm foundation for future graduate study in the speech, language, and hearing sciences within the framework of a well-rounded and comprehensive undergraduate education.

Faculty

<http://www.purdue.edu/hhs/slhs/directory/faculty/index.php>

Contact Information

Department Address

Purdue University
Speech, Language, & Hearing Sciences
715 Clinic Drive, Lyles-Porter Hall
West Lafayette, IN 47907-2122

Administrative Assistant to the Department

Teasha McKinley
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Graduate Information

For Graduate Information please see Speech, Language, and Hearing Sciences Graduate Program Information.

Speech, Language, and Hearing Sciences, BS

About the Program

The Department of Speech, Language, and Hearing Sciences (SLHS) at Purdue University is in the College of Health and Human Sciences. Undergraduate majors in SLHS obtain a Bachelor of Science degree in Speech, Language, and Hearing Sciences. Courses at the undergraduate level are designed to introduce students to basic processes of communication, speech, language, and hearing, and to disorders of communication, and eligible students may also earn course credit working as research assistants under the supervision of department faculty. Students who qualify also have the opportunity to participate in clinical observation and a practicum during the latter stages of their program. Our undergraduate program provides a firm foundation for future

graduate study in the speech, language, and hearing sciences within the framework of a well-rounded and comprehensive undergraduate education.

Degree Requirements and Supplemental Information

The full Program Requirements for 2016-17 Speech, Language, and Hearing Sciences include all Supplemental Information and selective lists of those categories which a student must fulfill in order to earn their degree. These are intended to be printer-friendly, but include less descriptive course detail.

Please see below for program requirements and the necessary degree fulfillments.

SLH-BS
SLHU
120 credits

Major Requirements (33 credits)

A minimum Grade Point Average (GPA) of 2.5 in SLHS 22700, 30200, 30300, 30600 and 30900 is required.

No grade lower than a "C-" will be allowed in any of these courses.

SLHS 11500 - Introduction To Communicative Disorders

Credit Hours: 3.00. Nature, systems, and causes of communicative disorders and the principal methods used for remediation. Typically offered Fall Spring.

SLHS 22700 - Elements Of Linguistics

Credit Hours: 3.00. (ENGL 22700) Credit will not be awarded for both AUSL 22700 and LC 26100. A summary of what is known about human language, its structure, its universality, and its diversity; language in its social setting; language in relation to other aspects of human inquiry and knowledge. Typically offered Summer Fall Spring.

SLHS 30200 - Hearing Science

Credit Hours: 3.00. An introduction to the scientific foundations of auditory sensation and perception. The course covers those aspects of acoustics most pertinent to understanding auditory processing of simple and complex sounds (e.g. speech and music), the anatomy and physiology of the peripheral and central auditory systems, and a range of auditory perceptual phenomena and their physiological correlates. Typically offered Spring.

SLHS 30300 - Anatomy And Physiology Of The Speech Mechanism

Credit Hours: 3.00. This course provides an introduction to the anatomical and physiological bases of the speech mechanism with an emphasis on the neural, respiratory, laryngeal, and supralaryngeal subsystems. Typically offered Fall.

SLHS 30600 - Introduction To Phonetics

Credit Hours: 3.00. Credit will not be given for both AUS 30600 and LING 31500. An introduction to articulatory phonetics, speech sounds in languages of the world, and principles and symbols of the International Phonetic Alphabet. Extensive practice in phonetic transcription. Typically offered Fall Spring.

SLHS 30900 - Language Development

Credit Hours: 3.00. (PSY 42600) Specific nature, sequence, and pattern of oral language development from birth through adolescence. Numerous examples illustrating the nature of language acquisition and approaches to the study of children's language are presented. Linguistic and psychological explanations of the sequence of development are discussed. Typically offered Fall Spring.

Area 1 - Speech, Language, and Hearing Sciences

Select 15 credits total, **MUST have minimum of 12 credits at the 40000 level or above.**

Can use any SLHS course not used to satisfy SLHS Foundation Requirements.

NO more than 3 credits total from:

SLHS 34500 - Research Methods In Infancy And Childhood

Credit Hours: 3.00. (PSY 31900) This is a laboratory-based course that focuses on methods to test childhood cognitive and language development. As part of the course, students will be working in the Purdue University Infant Labs. Permission of instructor required. Typically offered Fall Spring.

SLHS 49000 - Directed Study Special Problems

Credit Hours: 1.00 to 6.00. Designed for student to work with individual instructors on special topics of interest. Permission of instructor required. Typically offered Summer Fall Spring.

SLHS 49800 - Undergraduate Research Experience

Credit Hours: 1.00 to 4.00. The course allows students an opportunity to obtain first-hand experience with research in speech, language, and hearing sciences. Permission of instructor required. Typically offered Summer Fall Spring.

Required Courses in Other Departments (45-67 credits)

Modern Language Requirement

Proficiency through level IV in one language [Fulfills Humanities Core]

(Select from American Sign Language, Arabic, Chinese, French, German, Greek, Hebrew, Italian, Latin, Japanese, Portuguese, Russian, or Spanish.)

- 10100 - Credit Hours: 3.00 - 4.00
- 10200 - Credit Hours: 3.00 - 4.00
- 20100 - Credit Hours: 3.00 - 4.00
- 20200 - Credit Hours: 3.00 - 4.00

Math and Science Requirements

Depending on selection, courses may also be used to fulfill University Cores.

- (3-4) BIOL: Any course other than BIOL 14600, 14700, 20500 or 20600
- (3-4) CHM: Any course other than CHM 20000 or any PHYS course other than PHYS 21500
- (3) MA 15300 or higher [**Fulfills Quantitative Reasoning Core**]
- (3) STAT 30100, SOC 38200, or any STAT course 30000 level or higher

Area 2 - Pure and Applied Sciences

Select 6 credits. **Cannot use a course that is used to fulfill CORE or Math and Science requirement.**

- BIOL: Any course other than BIOL 11000, 14600, 14700, 20500 or 20600
- CHM: Any course above CHM 11100 other than CHM 20000
- ECE: Any ECE course
- MA: Any course above MA 15300
- PHYS: Any PHYS course other than PHYS 21500
- STAT: Any course at 30000 level or higher (SOC 38200 also accepted as a Statistic course)

Area 3 - Behavioral, Linguistic, and Social Sciences

Select 6 credits. **Cannot use a course that is used to fulfill CORE or Math and Science requirement.**

- ANTH: ANTH 34000, 36800 or 41400
- ASL: ASL 28000
- HK: HK 25300, 25400 or any 30000 or 40000 level course
- LC: LC 36100
- LING: Any 30000 or 40000 level course other than LING 31500 (credit not given for both LING 31500 and SLHS 30600)
- PSY: PSY 20000, 22200, 23500 or any 30000 or 40000 level course
- SOC: SOC 27500 or 37400

University Core

- **SLHS Behavior/Social Science** - select from University list (This is an SLHS requirement in addition to the University core requirement fulfilled by SLHS 22700) - Credit Hours: 3.00
- **SLHS Information Literacy**- select from University list (This is an SLHS requirement in addition to the University core requirement) - Credit Hours: 0.00 - 3.00
- **[Information Literacy Core]** - select from University list (IF STAT 30100 is selected for other requirements, this requirement is fulfilled) - Credit Hours: 0.00 - 3.00
- **[Oral Communication Core]** - select from University list - Credit Hours: 3.00
- **[Science Core]** - select from University list (MAY be fulfilled, depending on course selected for other requirements) - Credit Hours: 0.00 - 3.00
- **[Science Core]** - select from University list (MAY be fulfilled, depending on course selected for other requirements) - Credit Hours: 0.00 - 4.00
- **[Written Communication Core]** - select from University list - Credit Hours: 3.00 - 4.00

Electives (20-42 credits)

Note

It is a university requirement that at least 32 credits of coursework be obtained at the 30000 level or higher.

120 semester credits required for Bachelor of Science degree

University Foundational Learning Outcomes List

<https://www.purdue.edu/provost/initiatives/curriculum/course.html>

32 Credits @ 30000 Level

SLHS Foundation Courses* - 12.00 credits

SLHS Area 1 40000 Courses* - 12.00 credits

* Assuming no transfer credits.

Program Requirements

A Minimum GPA of 2.5 in SLHS 22700, 30200, 30300, 30600, and 30900 is required for SLHS major.
No grade lower than a "C-" will be allowed in any of these courses.

Fall 1st Year

SLHS 11500 - Introduction To Communicative Disorders

Credit Hours: 3.00. Nature, systems, and causes of communicative disorders and the principal methods used for remediation. Typically offered Fall Spring.

ENGL 10600 - First-Year Composition

Credit Hours: 4.00. Extensive practice in writing clear and effective prose. Instruction in organization, audience, style, and research-based writing. Typically offered Fall Spring Summer. NOTE: Concurrent registration is not permitted for ENGL 10600 and COM 11400.

ENGL 10800 - Accelerated First-Year Composition

Credit Hours: 3.00. An accelerated composition course that substitutes for ENGL 10600 for students showing superior writing ability. Typically offered Summer Fall Spring.

- Foreign Language - Credit Hours: 3.00
- MATH (Quantitative Reasoning)* - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15-17 Credits

Spring 1st Year

SLHS 22700 - Elements Of Linguistics

Credit Hours: 3.00. (ENGL 22700) Credit will not be awarded for both AUSL 22700 and LC 26100. A summary of what is known about human language, its structure, its universality, and its diversity; language in its social setting; language in relation to other aspects of human inquiry and knowledge. Typically offered Summer Fall Spring.

- CORE - Oral Communications* - Credit Hours: 3.00
- Foreign Language - Credit Hours: 3.00 - 4.00
- CHM or PHYS (Science)* - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00

15-17 Credits

Fall 2nd Year

SLHS 30200 - Hearing Science

Credit Hours: 3.00. An introduction to the scientific foundations of auditory sensation and perception. The course covers those aspects of acoustics most pertinent to understanding auditory processing of simple and complex sounds (e.g. speech and music),

the anatomy and physiology of the peripheral and central auditory systems, and a range of auditory perceptual phenomena and their physiological correlates. Typically offered Spring.

SLHS 30300 - Anatomy And Physiology Of The Speech Mechanism

Credit Hours: 3.00. This course provides an introduction to the anatomical and physiological bases of the speech mechanism with an emphasis on the neural, respiratory, laryngeal, and supralaryngeal subsystems. Typically offered Fall.

SLHS 30600 - Introduction To Phonetics

Credit Hours: 3.00. Credit will not be given for both AUS 30600 and LING 31500. An introduction to articulatory phonetics, speech sounds in languages of the world, and principles and symbols of the International Phonetic Alphabet. Extensive practice in phonetic transcription. Typically offered Fall Spring.

SLHS 30900 - Language Development

Credit Hours: 3.00. (PSY 42600) Specific nature, sequence, and pattern of oral language development from birth through adolescence. Numerous examples illustrating the nature of language acquisition and approaches to the study of children's language are presented. Linguistic and psychological explanations of the sequence of development are discussed. Typically offered Fall Spring.

- Foreign Language 20100 - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15-16 Credits

Spring 2nd Year

SLHS 30200 - Hearing Science

Credit Hours: 3.00. An introduction to the scientific foundations of auditory sensation and perception. The course covers those aspects of acoustics most pertinent to understanding auditory processing of simple and complex sounds (e.g. speech and music), the anatomy and physiology of the peripheral and central auditory systems, and a range of auditory perceptual phenomena and their physiological correlates. Typically offered Spring.

SLHS 30300 - Anatomy And Physiology Of The Speech Mechanism

Credit Hours: 3.00. This course provides an introduction to the anatomical and physiological bases of the speech mechanism with an emphasis on the neural, respiratory, laryngeal, and supralaryngeal subsystems. Typically offered Fall.

SLHS 30600 - Introduction To Phonetics

Credit Hours: 3.00. Credit will not be given for both AUS 30600 and LING 31500. An introduction to articulatory phonetics, speech sounds in languages of the world, and principles and symbols of the International Phonetic Alphabet. Extensive practice in phonetic transcription. Typically offered Fall Spring.

SLHS 30900 - Language Development

Credit Hours: 3.00. (PSY 42600) Specific nature, sequence, and pattern of oral language development from birth through adolescence. Numerous examples illustrating the nature of language acquisition and approaches to the study of children's language are presented. Linguistic and psychological explanations of the sequence of development are discussed. Typically offered Fall Spring.

- Foreign Language 20200 (Humanities)* - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15-16 Credits

Fall 3rd Year

- Additional CORE - Behavior/Social Science* - Credit Hours: 3.00
- BIOL (Science)* - Credit Hours: 3.00 - 4.00
- Area 1 - Credit Hours: 3.00
- Area 1 - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15-16 Credits

Spring 3rd Year

- STAT (Information Literacy if STAT 30100)*
- Area 1 - Credit Hours: 3.00 - 4.00
- Area 2 - Credit Hours: 3.00 - 4.00
- Area 3 - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15-17 Credits

Fall 4th Year

- Area 1 - Credit Hours: 3.00 - 4.00
- Area 3 - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15-16 Credits

Spring 4th Year

- Area 1 - Credit Hours: 3.00
- Area 2 - Credit Hours: 3.00 - 4.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00
- Elective - Credit Hours: 3.00

15-16 Credits

Note

* CORE Selectives may be chosen in any order, but **ALL** must be taken to graduate

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.