

Student: _____ PUID: _____ Catalog Term: _____

Additional Majors: _____ Minors: _____

Radiological Health Sciences/Pre-Medical Physics Core (University Foundational Learning Outcomes) (27-29 credits)

- ____ (4-3) ENGL 10600 First-Year Composition or ENGL 10800 Accelerated First-Year Composition **[Written Communication and [Information Literacy]**
- ____ (3) COM 11400 Fundamental of Speech Communication or COM 21700 Science Writing & Presentations **[Oral Communication]**
- ____ (4) BIOL 11000 Fundamentals of Biology I **[Fulfills 1 Science Core Course]**
- ____ (4) BIOL 11100 Fundamentals of Biology II **[Fulfills 1 Science Core Course]**
- ____ (3) _____ **[Humanities]** – *select course from University list*
- ____ (3) _____ **[Behavior/Social Science Humanities]** – *select course from University list*
- ____ (4-5) MA 16100* Plane Analytic Geometry & Calculus I or MA 16500* Analytic Geometry & Calculus I **[Quantitative Reasoning]**
- ____ (3) HSCI 20100 Principles of Public Health Science **[Science, Technology & Society]**

Required Courses for Radiological Health Sciences/Pre-Medical Physics (84-85 credits)

- ____ (4) BIOL 20300 Human Anatomy & Physiology
- ____ (4) BIOL 20400 Human Anatomy & Physiology
- ____ (4) CHM 11500 General Chemistry
- ____ (4) CHM 11600 General Chemistry
- ____ (3) _____ English Selective – *select from list*
- ____ (2) HSCI 10100 Introduction to Health Sciences Professions
- ____ (3) HSCI 20200 Essentials of Environmental, Occupational, and Radiological Health Sciences
- ____ (3) HSCI 31200* Radiation Science Fundamentals
- ____ (2) HSCI 31300 Principles of Radiation Detection & Measurement
- ____ (2) HSCI 51400* Radiation Instrumentation Laboratory
- ____ (3) HSCI 52600 Principles of Health Physics & Dosimetry
- ____ (3) HSCI 54000* Radiation Biology
- ____ (3) HSCI 57000* Introduction to Medical Diagnostic Imaging
- ____ (3) HSCI 57200* Radiation Oncology Physics
- ____ (2) HSCI 57400* Medical Health Physics
- ____ (4-5) MA 16200* Plane Analytic Geometry & Calculus II or MA 16600* Analytic Geometry & Calculus II
- ____ (4) MA 26100 Multivariate Calculus
- ____ (4) MA 26200 Linear Algebra & Differential Equations
- ____ (3) _____ Math-Computer Sciences Selective – *select from list*
- ____ (4) PHYS 17200* Modern Mechanics
- ____ (3) PHYS 24100 Electricity & Optics
- ____ (1) PHYS 25200 Electricity & Optics Laboratory
- ____ (3) _____ Physics Selective – *must be PHYS 30000 or higher ***
- ____ (3) _____ Physics Selective – *must be PHYS 30000 or higher ***
- ____ (1) PHYS 34000 Modern Physics Laboratory
- ____ (3) PHYS 34200 Modern Physics
- ____ (3) _____ Radiological Health Sciences Selective – *select from list*
- ____ (3) STAT 30100 Elementary Statistical Methods

HSCI Humanities, Behavioral/Social Sciences Selectives – select from list (3 credits)

- ____ (3) _____ *select course from HSCI Humanities, Behavioral/Social Sciences list*

Electives (3-6 credits)

____ () _____ ____ () _____ ____ () _____ ____ () _____

***A grade of “C” or higher must be earned in HSCI 31200, HSCI 31300, HSCI 51400, HSCI 54000, HSCI 57000, HSCI 57200, HSCI 57400; MA 16100/16200 or MA 16500/16600; and PHYS 17200.**

An Ethics course (such as PHIL 11100 Ethics, PHIL 27000 Biomedical Ethics, or PHIL 29000 Environmental Ethics) is highly recommended.

****Suggested physics selectives are PHYS 31000 Intermediate Mechanics, PHYS 36000 Quantum Mechanics, and/or PHYS 55600 Introductory Nuclear Physics.**

All students must complete 32 credits of 300 level or higher courses at Purdue for graduation.

120 credits required for Bachelor of Science degree

Revised 5/2014

Name _____ School of Health Sciences (HSCI) Minor(s) _____

PUID _____ HEALTH SCIENCES RADIOLOGICAL PRE-MEDICAL HEALTH SCIENCES

RHMP

120 credit hours required

Effective: Fall 2014 Beginners

Freshman Year	First Semester	Sem/Yr	Grade
BIOL 11000 (4)	Fundamentals of Biology I		
(S)*			
CHM 11500 (4)	General Chemistry I		
(S)*	MA 154, 158, or 159 or calculus placement		
COM 11400 (3) or	Fundamentals of Speech Communication or		
COM 21700 (3)***	Science Writing and Presentation		
(OC)*			
HSCI 10100 (2)	Intro to Health Science Professions		
	Fall only		
MA 16500 (4) or	Plane Analytic GEOM & CALC I**		
MA 16100 (5)	(ALEKS = 85)		
(QR)*			
Total Credits = 17 - 18			

	Second Semester	Sem/Yr	Grade
BIOL 11100 (4)	Fundamentals of Biology II		
(S)*	(BIOL 11000)		
CHM 11600 (4)	General Chemistry II		
(S)*	(CHM 11200 or CHM 11500)		
ENGL 10600 (4) or	First-Year English Composition		
ENGL 10800 (3)***	Accelerated First-Year Composition		
(WC,IL)*			
MA 16600 (4) or	Plane Analytic GEOM & CALC II**		
MA 16200 (5)	(MA 16500 or 16100)		
(QR)*			
Total Credits = 15 - 17			

Sophomore Year	Third Semester	Sem/Yr	Grade
HSCI 20200 (3)	Essentials of EH, OH and RH		
(STS)*	Fall only (3 credits in BIOL & CHM)		
MA 26100 (4)	Multivariate Calculus		
(QR)*	(MA 16200 or MA 166000)		
PHYS 17200 (4)	Modern Mechanics**		
(S)*	(MA 16100 or 16500 or ALEKS = 85)		
STAT 301 (3)	Elementary Statistical Methods		
(IL)*			
Total Credits = 14			

	Fourth Semester	Sem/Yr	Grade
HSCI 20100 (3)	Principles of Public Health Sciences		
(STS)*	Spring only (Classification of at least 03)		
MA 26200 (4)	Linear Algebra & Differential Equations		
(QR)*	(MA 26100)		
PHYS 24100 (3)	Electricity & Optics		
(S)*	(PHYS 17200)		
PHYS 25200 (1)	Electricity & Optics Lab		
	(PHYS 24100 or co-req)		
Humanities Sel. (3)			
(BSS)*	(Select from University list)		
Total Credits = 14			

***These courses are usually completed during the first/freshman year. However, one or both could be taken during summer or the sophomore year in order to decrease the credit load.

Junior Year	Fifth Semester	Sem/Yr	Grade
BIOL 20300 (4)	Human Anatomy & Physiology I		
(S)*	Fall only		
HSCI 31200 (3)	Radiation Science Fundamentals**		
	Fall only (MA 16600 or 16200 & PHYS 17200)		
HSCI 31300 (2)	Principles of Rad. Detection & Measurement **		
	Fall only (MA 16600 or 16200 & PHYS 17200)		
PHYS 34200 (3)	Modern Physics		
	(PHYS 24100)		
PHYS 34000 (1)	Modern Physics Lab		
	(PHYS 24100) (PHYS 34200 co-req)		
English Selective (3)			
Total Credits = 16			

Senior Year	Seventh Semester	Sem/Yr	Grade
HSCI 52600 (3)	Principles of HP & Dosimetry		
	Fall only (HSCI 31200)		
HSCI 57400 (2)	Medical Health Physics**		
	Fall only (HSCI 31200 & MA 26100 & PHYS 24100)		
PHYS. Selective (3)***			
Humanities Sel. (3)			
(H)*	(Select from University list)		
RADH HSCI Sel. (3)			
	Select from RADH HSCI Selective List		
Total Credits = 14			

University Foundations Learning Outcome List

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

*(BSS) Behavioral/Social Science - 1 course

*(H) Humanities - 1 course

*(OC) Oral Communication - 1 course

*(QR) Quantitative Reasoning - 1 course

*(S) Science - 2 courses

*(IL) Information Literacy - 1 course

*(STS) Science, Technology, & Society) - 1 course

*(WC) Written Communication – 1 course

	Sixth Semester	Sem/Yr	Grade
BIOL 20400 (4)	Human Anatomy & Physiology II		
(S)*	Spring only (BIOL 20300)		
HSCI 51400 (2)	Radiation Instr. Lab**		
	Spring only (HSCI 31200)		
HSCI 54000 (3)	Radiation Biology**		
	Spring only (BIOL 11100 & HSCI 31200)		
MA/CS Selective (3)			
	(Select from MA/CS Selective List)		
HSCI Hum. Sel. (3)			
Total Credits = 15			

	Eighth Semester	Sem/Yr	Grade
HSCI 570000 (3)	Intro to Medical Diagnostic Imaging**		
	Spring only (HSCI 31200 & MA 26200)		
HSCI 57200 (3)	Radiation Oncology Physics**		
	Spring only (HSCI 31200 & MA 26100 & PHYS 24100)		
Physics Selective (3)***			
Elective (3)			
Elective (0 – 3)			
Total Credits = 12 - 15			

Purdue students must complete 32 credit hours of 300 level or above courses for graduation with a Bachelor of Science degree.

Student is responsible for completing and fulfilling all graduation requirements.

****A minimum grade of C must be earned in HSCI 312, 313, 514, 540, 570, 572, CALC I & II, PHYS 172.**

*****Suggested courses: PHYS 31000, 36000, or 55600.**

Rad'l Hlth Pre-Med Phys
05/2014