PURDUE UNIVERSITY

RADIOLOGICAL HEALTH SCIENCES / PRE-MEDICAL PHYSICS
College of Health and Human Sciences

HLTH-BS
RHMP
120 credits

Student: _____ PUID: _____ Catalog Term: _____

Additional Majors: _____ Minors: _____

Requirements (103-105 credits)

____ (4) BIOL 11000 Fundamentals of Biology I
____ (4) BIOL 11100 Fundamentals of Biology II
____ (4) BIOL 20300 Human Anatomy & Physiology
____ (4) BIOL 20400 Human Anatomy & Physiology
____ (4) CHM 11500 General Chemistry
____ (4) CHM 11600 General Chemistry
____ (3) COM 11400 Fundamental of Speech Communication
____ (4) ENGL 10600 First Year Composition
____ (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 16100* Plane Analytic Geometry & Calculus I or MA 16500* Analytic Geometry & Calculus I
____ (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 or 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

Humanities Selectives – select from list (9 credits)

____ (3) _____
____ (3) _____
____ (3) _____

Electives (6-8 credits)

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

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

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

120 credits required for Bachelor of Science degree

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

Revised 5/2012

English Selective List

ENGL 23000	Great Narrative Works
ENGL 26600	World Literature: From The Beginnings To 1700 A.D.
ENGL 26700	World Literature: From 1700 A.D. To The Present
ENGL 30400	Advanced Composition
ENGL 30600	Introduction To Professional Writing
ENGL 42000	Business Writing
ENGL 42100	Technical Writing

Math and Computer Science Selective List

CS 15800	C Programming
CS 15900	Programming Applications for Engineers
CS 18000	Programming I
CS 31400	Numerical Methods
CS 47800	Introduction to Bioinformatics
MA 26200	Linear Algebra and Differential Equations
MA 41600	Probability
MA 52700	Advanced Mathematics for Engineers and Physicists I
MA 52800	Advanced Mathematics for Engineers and Physicists II
PHYS 58000	Computational Physics
STAT 31100	Introductory Probability
STAT 50300	Statistical Methods for Biology
STAT 51100	Statistical Methods
STAT 51200	Applied Regression Analysis

Radiological Health Sciences Selective List

CHM 22400	Introductory Quantitative Analysis
CHM 25500	Organic Chemistry
CHM 25501	Organic Chemistry Laboratory
CHM 25600	Organic Chemistry
CHM 25601	Organic Chemistry Laboratory
CHM 33300	Principles of Biochemistry
HSCI 34500	Introduction To Occupational And Environmental Health Science
BIOL 41500	Introduction To Molecular Biology
BIOL 44400	Human Genetics
BIOL 54200	Animal Cell Culture
BIOL 51600	Molecular Biology Of Cancer
HK 44500	Principles of Epidemiology
HSCI 54700	Environmental Epidemiology
HSCI 55100	Health Effects of Non-ionizing Radiation
HSCI 55200	Introduction to Aerosol Science
HSCI 56000	Toxicology
HSCI 58000	Occupational Ergonomics
PHIL 27000	Biomedical Ethics
PHIL 29000	Environmental Ethics
PHIL 35000	Philosophy and Probability
PHYS 22000	General Physics
PHYS 22100	General Physics
PHYS 31000	Intermediate Mechanics
PHYS 36000	Quantum Mechanics
PHYS 55000	Introduction To Quantum Mechanics
PHYS 55600	Introductory Nuclear Physics
PHYS 56400	Introduction To Elements Particle Physics
PHYS 56500	Introduction To Elementary Particle Physics II
AT 57200	Human Error

Humanities Selective 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)

Name: _____

Student I.D.: _____

School of Health Sciences

Radiological Health Sciences

Pre-Medical Physics - RHMP

120 Semester Hours

Date: _____

Minor Code: _____

	Freshman Year - First Semester	Sem/Yr	Grade		Second Semester	Sem/Yr	Grade
(4)	BIOL 11000-Fundamentals of BIOL I			(4)	BIOL 11100-Fundamentals of BIOL II		
					(BIOL 11000)		
(4)	CHM 11500-General Chemistry I			(4)	CHM 11600 -General Chemistry II		
	(MA 15900 or CALC Placement)				(CHM 11500)		
(2)	HSCI 10100-Intro to HSCI Professions Fall only			(4)	ENGL 10600-Freshman Composition		
(4-5)	MA 16100/16500-Plane Analytic Geom &			(4-5)	MA 16200/16600-PlaneAnalytic Geom &		
	CALC I				CALC II (MA 16100/16500)		
[14-15]				[16-17]			

Notes:

Notes:

	Sophomore Year - Third Semester	Sem/Yr	Grade		Fourth Semester	Sem/Yr	Grade
(3)	COM 11400-Fundamentals of Speech			(4)	MA 26200-Linear Algebra & Diff Equations		
(3)	HSCI 20200-Essntls of RH, EH, + OH			(3)	PHYS 24100-Electricity and Optics		
	(1 sem of BIOL & 1 sem of CHM) Fall only						
				(1)	PHYS 25200-Electricity and Optics Lab		
(4)	MA 26100-Multivariate Calculus						
				(3)	STAT 30100-Elem. Statistical Methods		
(4)	PHYS 17200-Modern Mechanics						
	(MA 16200/16600)			(3)	English Elective		
(3)	Elective						
[17]				[14]			

Notes: All students must complete 32 hours
0f 300 level or higher courses at Purdue for graduation.

Notes: Responsibility for completing graduation requirements
is solely that of the student.

School of Health Sciences

Radiological Health Science - RHMP

Pre- Medical Physics Concentration

120 Semester Hours

Junior Year - Fifth Semester		Sem/Yr	Grade		Sixth Semester		Sem/Yr	Grade
(4)	BIOL 20300-Human ANAT & Physiology I				(4)	BIOL 20400-Human ANAT & Physiology II		
	(BIOL 20300) Fall only					(BIOL 20300) Spring only		
(3)	HSCI 31200*-Radiation Science Fund.				(2)	HSCI 31300*-Principles of Rad. Detection &		
	(1 yr CALC+ 1 yr PHYS) Fall only					Measurement (HSCI 31200) Spring only		
(3)	Math and Comp Sci Elective				(2)	HSCI 51400-Radiation Instrumentation Lab		
						Spring only		
(3)	PHYS 30000 or higher PHYS Elective				(3)	HSCI 54000*-Radiation Biology		
						Spring only		
(3)	Humanities Selective				(3)	PHYS 34200-Modern Physics		
[16]					[14]			
Notes:					Notes:			

Senior Year - Seventh Semester		Sem/Yr	Grade		Eighth Semester		Sem/Yr	Grade
(3)	HSCI 52600-Principles of Health Physics				(3)	HSCI 57000-Intro to Medical Diagnostic		
	and Dosimetry Fall only					Imaging Spring only		
					(3)	HSCI 57200-Radiation Oncology Physics		
(2)	HSCI 57400-Medical Health Physics					Spring only		
	Fall only				(3)	Elective		
(1)	PHYS 3400-Modern Physics Lab							
					(3)	Humanities Elective		
(3)	Elective							
					(3)	Rad. Health Sciences Elective		
(3)	Humanities Elective							
(3)	PHYS 30000 or higher PHYS Elective							
[15]					[15]			
Notes:	Suggested physics electives are PHYS 31000-Intermediate Mechanics,				Notes:			
	PHYS 36000-Quantum Mechanics and/or PHYS 55600-Introductory							
	Nuclear Physics							
						Revision Date: Jan 5, 2012		