

BIOMEDICAL HEALTH SCIENCES PRE-OPTOMETRY CONCENTRATION

College of Health and Human Sciences

BMHS-BS BMHS – PROP 120 credits

Student:		PUID:	Catalog Term: Fall 2024
Additional	Majors:	Minors:	
Major Reg	uirements (67 credits)		
	BCHM 30700 Biochemistry or CHM 3390	0 Biochemistry: A Molecular Appro	ach
(4)	BIOL 11000 Fundamentals of Biology I [S	atisfies 1 Science Core Coursel	
(4)	BIOL 11100 Fundamentals of Biology II [Satisfies 1 Science Core Coursel	
(4)	BIOL 20300 Human Anatomy & Physiolog	ZV	
(4)	BIOL 20400 Human Anatomy & Physiolog	IV	
(4)	BIOL 20400 Human Anatomy & Physiolog CHM 11500 General Chemistry	50	
(4)	CHM 11600 General Chemistry		
	CHM 25500 Organic Chemistry		
	CHM 25501 Organic Chemistry Lab		
	CHM 25600 Organic Chemistry		
	CHM 25601 Organic Chemistry Lab		
(2)	HSCI 10100 Introduction to the Health Sc	iences Professions	
	HSCI 13100 Introduction to Medical Tern		
(3)	HSCI 20100 Principles of Public Health Sc	cience [Satisfies Science, Technolo	ogy & Society Core]
(3)	HSCI 20200 Essentials of Environmental,	Occupational, and Radiological Hea	alth Sciences
(3)	HSCI 22500 Healthcare Leadership and S	afety	
(3)	MA 16010 Applied Calculus I [Satisfies Q	uantitative Reasoning Core]	
(3)	STAT 30100 Elementary Statistical Metho	ods or STAT 50300 Statistical Meth	ods for Biology
HSC	CI Selective – select a total of 12 credits fr	om HSCI list	
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	netry Concentration (24 credits)		
(4)	BIOL 22100 Introduction to Microbiology		
(3)	HSCI Humanitie	s, Behavioral/Social Sciences Sel	ective – select from HSCI list
	PHYS 22000 General Physics or PHYS 233		
	PHYS 22100 General Physics or PHYS 234		
	ience and Health Selective – select a total		
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Other Den	artmental / Program Course Requireme	nts (15-16 gradits)	
	COM 11400 Fundamental of Speech Comn		nication Corel
	B)ENGL 10600 First Year Composition or EN		
(1 >	Communication Core and [Information		omposition [satisfies Wifeen
(3)	PSY 12000 Elementary Psychology [Satisf		rel
(3)	English Selective – sele [Humanities Core] – se	elect from University list	
		,	
Electives (<u>13-14 credits)</u>		
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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/students/s-initiatives/curriculum/courses.html

HSCI Selective List

HSCI 30500	Basics of Oncology
HSCI 31000	Imaging in Medicine
HSCI 31200	Radiation Science Fundamentals
HSCI 31300	Principles of Radiation Detection and Measurement
HSCI 33300	Introduction to Immunology

HSCI 33300 Introduction to Immunology
HSCI 33400 Lung Physiology and Medicine

HSCI 33500 Heart Physiology and Medicine HSCI 33600 Eye Physiology & Disease

HSCI 34500 Introduction to Occupational and Environmental Health Sciences

HSCI 34600 Industrial Hygiene Engineering Control

HSCI 34800 Industrial Hygiene Instrumentation Techniques HSCI 35300 Occupational Safety Management and Culture or

 $HSCI\ 55300\ Advanced\ Occupational\ Safety\ Management\ and\ Culture$

HSCI 36000 Everyday Toxicology: Poisonings from Clinics to Courtrooms

HSCI 41500 Introduction to Nuclear and Radiological Source Security HSCI 42000 Applied Anatomy for Medicine

HSCI 44700 Global Workplace Health

HSCI 54600 Advance Industrial Hygiene Control Technology

HSCI 54800 Advanced Industrial Hygiene Instrumentation Techniques

HSCI 56000 Toxicology

HSCI 56200 Analytical Toxicology and Pathology

HSCI 58000 Occupational Biomechanics and Ergonomics

HSCI 58001 Occupational Biomechanics and Ergonomics Laboratory

HSCI Humanities, Behavioral/Social Sciences Selectives List - select any course(s) from the following subjects:

American Sign Language (ASL)

Anthropology (ANTH)

Arabic (ARAB)

Art & Design (AD)

Chinese (CHNS)

Classics (CLCS)

Communication (COM)

Dance (DANC)

Economics (ECON)

English (ENGL)

French (FR)

German (GER)

Greek (GREK)

Hebrew (HEBR)

History (HIST)

Interdisciplinary Studies (IDIS)

Italian (ITAL)

Japanese (JPNS)

Korean (KOR)

Latin (LTN)

Music (MUS)

Philosophy (PHIL)

Political Science (POL)

Portuguese (PTGS)

Psychology (PSY)

Russian (RUS)

Sociology (SOC)

Spanish (SPAN)

Theatre (THTR)

Science and Health Selective

Any 30000 or above offering in the following areas:

BCHM

CHM

NUTR

or

Any 20000 or above offering in the following areas:

ANSC

BIOL

ENTM

HDFS

НК

MA

PHYS

PSY

PUBH

or

Select offerings:

AGRY 32000 Genetics

AGRY 32100 Genetics Laboratory

ANTH 20400 Human Origins

ANTH 21200 Culture, Food & Health

ANTH 53400 Human Osteology

MA 16020 Applied Calculus II

MA 16200 Plane Analytic Geometry & Calculus II

MA 16600 Analytical Geometry & Calculus II

PHYS 17200 Modern Mechanics

VM 10200 Careers in Veterinary Medicine

A student may elect the Pass / Not-Pass (P/NP) grading option for elective courses only, unless an academic unit requires that a specific departmental course/s be taken P/NP. Students may elect to take University Core Curriculum courses P/NP; however, some major Plans of Study require courses that also fulfill UCC foundational outcomes. In such cases, students may not elect the P/NP option. A maximum of 24 credits of elective courses under the P/NP grading option can be used toward graduation requirements. For further information, students should refer to the College of Health and Human Sciences P/NP Policy.

Students are encouraged to use this advising worksheet as a resource when planning progress toward completion of degree requirements. An Academic Advisor may be contacted for assistance in interpreting this worksheet. This worksheet is not an academic transcript, and it is not official notification of completion of degree or certificate requirements. The University Catalog is the authoritative source for displaying plans of study. The student is ultimately responsible for knowing and completing all degree requirements



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Suggested Arrangement of Courses:

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
4	*BIOL 11000 ^{CC}		4	*BIOL 11100 ^{cc}	BIOL 11000
4	*CHM 11500 ^{CC}	MA 15400 or MA 15800 or ALEKS = 75	4	*CHM 11600 ^{CC}	CHM 11500
4-3	*ENGL 10600 °C OR 10800 °C		3	*COM 11400 ^{cc}	
2	HSCI 10100	Fall only	3	HSCI 13100	
3	*MA 16010 ^{CC}	ALEKS = 75 or MA 15400 = C- or 15800 = C-			
16-17			14		

Credits	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
4	*BIOL 20300 [©]	Fall only	4	*BIOL 20400 ^{CC}	Spring only BIOL 20300
3	CHM 25500 ^{CC}	CHM 11200 or CHM 11600	3	CHM 25600 ^{cc}	CHM 25500
1	CHM 25501 ^{cc}	CHM 25500 or may be taken concurrently	1	CHM 25601 ^{CC}	CHM 25600 or may be taken concurrently
3	*HSCI 20200	Fall only 3 cr. of BIOL & CHM	3	*HSCI 20100	Spring only Classification of 03
3	*STAT 30100 or STAT 50300		3	HSCI 22500	
			2	Elective	
14			16		

Credits	Fall 3rd Year	Prerequisite	Credits	Spring 3rd Year	Prerequisite
3	BCHM 30700 or CHM 33900	CHM 25600	4	BIOL 22100	BIOL 11000 & CHM 11600
4	PHYS 22000 or PHYS 23300		4	PHYS 22100 or PHYS 23400	
3	HSCI Selective		3	HSCI Selective	
3	Humanities Selective	Select from University list	3	*PSY 12000	Select from HSCI list
3	Elective				
16			14		

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4th Year	Prerequisite
3	Science and Health Selective		3	Science and Health Selective	
3	Science and Health Selective		3	HSCI HBSS Selective	Select from HSCI list
3	HSCI Selective		3	HSCI Selective	
3	English Selective	Select any 20000 or above ENGL course	3	Elective	
3	Elective		2-3	Elective	
15			14-15		

^{*}Satisfies a University Core Requirement.

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

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is the knowledge source for specific requirements and completion.

^{cc} Critical Course – a course that a student must be able to pass to persist and succeed in a particular major.