BIOMEDICAL HEALTH SCIENCES
PRE-OPTOMETRY CONCENTRATION
College of Health and Human Sciences
BMHS-BS
BMHS – PROP
120 credits

Student: ____________________________________________  PUID: _________________________________  Catalog Term: Fall 2023

Additional Majors: __________________________________________________  Minors: _______________________________________________________________

Major Requirements (67 credits)
(3) BCHM 30700 Biochemistry or CHM 33900 Biochemistry: A Molecular Approach
(4) BIOL 11000 Fundamentals of Biology I [Satisfies 1 Science Core Course]
(4) BIOL 11100 Fundamentals of Biology II [Satisfies 1 Science Core Course]
(4) BIOL 20300 Human Anatomy & Physiology
(4) BIOL 20400 Human Anatomy & Physiology
(4) CHM 11500 General Chemistry
(4) CHM 11600 General Chemistry
(3) CHM 25500 Organic Chemistry
(1) CHM 25501 Organic Chemistry Lab
(3) CHM 25600 Organic Chemistry
(1) CHM 25601 Organic Chemistry Lab
(2) HSCI 10100 Introduction to the Health Sciences Professions
(3) HSCI 13100 Introduction to Medical Terminology
(3) HSCI 20100 Principles of Public Health Science [Satisfies Science, Technology & Society Core]
(3) HSCI 20200 Essentials of Environmental, Occupational, and Radiological Health Sciences
(3) HSCI 22500 Healthcare Leadership and Safety
(3) MA 16010 Applied Calculus I [Satisfies Quantitative Reasoning Core]
(3) STAT 30100 Elementary Statistical Methods or STAT 50300 Statistical Methods for Biology

HSCI Selective – select a total of 12 credits from HSCI list
( ) ____________________________ ( ) ____________________________
( ) ____________________________ ( ) ____________________________

Pre-Optometry Concentration (24 credits)
(4) BIOL 22100 Introduction to Microbiology
(3) ____________________________ HSCI Humanities, Behavioral/Social Sciences Selective – select from HSCI list
(4) PHYS 22000 General Physics or PHYS 23300 Physics for Life Sciences I
(4) PHYS 22100 General Physics or PHYS 23400 Physics for Life Sciences II

Science and Health Selective – select a total of 9 credits from list
( ) ____________________________ ( ) ____________________________
( ) ____________________________ ( ) ____________________________

Other Departmental / Program Course Requirements (15-16 credits)
(3) COM 11400 Fundamental of Speech Communication [Satisfies Oral Communication Core]
(4-3) ENGL 10600 First Year Composition or ENGL 10800 Accelerated First-Year Composition [Satisfies Written Communication Core] and [Information Literacy Core]
(3) PSY 12000 Elementary Psychology [Satisfies Behavioral/Social Science Core]
(3) ____________________________ English Selective – select any 20000 level or above ENGL course
(3) ____________________________ [Humanities Core] – select from University list

Electives (13-14 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

Revised 5/2023
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 33300 Introduction to Immunology
- HSCI 33400 Lung Physiology and Medicine
- HSCI 33500 Heart Physiology and Medicine
- HSCI 34500 Introduction to Occupational and Environmental Health Sciences
- HSCI 34600 Industrial Hygiene Engineering Control
- HSCI 34800 Industrial Hygiene Instrumentation Techniques
- 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 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
HK
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.
**Suggested Arrangement of Courses:**

<table>
<thead>
<tr>
<th>Credits</th>
<th>Fall 1st Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 1st Year</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>*BIOL 11000cc</td>
<td></td>
<td>4</td>
<td>*BIOL 11100cc</td>
<td>BIOL 11000</td>
</tr>
<tr>
<td>4</td>
<td>*CHM 11500cc</td>
<td>MA 15400 or MA 15800 or ALEKS = 75</td>
<td>4</td>
<td>*CHM 11600cc</td>
<td>CHM 11500</td>
</tr>
<tr>
<td>4-3</td>
<td>*ENGL 10600cc OR 10800cc</td>
<td></td>
<td>3</td>
<td>*COM 11400cc</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>HSCI 10100</td>
<td>Fall only</td>
<td>3</td>
<td>HSCI 13100</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>*MA16010cc</td>
<td>ALEKS = 75 or MA 15400 = C or 15800 = C</td>
<td></td>
<td>16-17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
<th>Fall 2nd Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 2nd Year</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>*BIOL 20300cc</td>
<td>Fall only</td>
<td>4</td>
<td>*BIOL 20400cc</td>
<td>Spring only BIOL 20300</td>
</tr>
<tr>
<td>3</td>
<td>CHM 25500cc</td>
<td>CHM 11200 or CHM 11600</td>
<td>3</td>
<td>CHM 25600cc</td>
<td>CHM 25500</td>
</tr>
<tr>
<td>1</td>
<td>CHM 25501cc</td>
<td>CHM 2550 or may be taken concurrently</td>
<td>1</td>
<td>CHM 25601cc</td>
<td>CHM 25600 or may be taken concurrently</td>
</tr>
<tr>
<td>3</td>
<td>*HSCI 20200</td>
<td>Fall only 3 cr. of BIOL &amp; CHM</td>
<td>3</td>
<td>*HSCI 20100</td>
<td>Spring only Classification of 03</td>
</tr>
<tr>
<td>3</td>
<td>*STAT 30100 or STAT 50300</td>
<td></td>
<td>3</td>
<td>HSCI 22500</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>16</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
<th>Fall 3rd Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 3rd Year</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>BCHM 30700 or CHM 33900</td>
<td>CHM 25600</td>
<td>4</td>
<td>BIOL 22100</td>
<td>BIOL 11000 &amp; CHM 11600</td>
</tr>
<tr>
<td>4</td>
<td>PHYS 22000 or PHYS 23300</td>
<td>4</td>
<td>PHYS 22100 or PHYS 23400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>HSCI Selective</td>
<td>3</td>
<td>HSCI Selective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Humanities Selective</td>
<td>Select from University list</td>
<td>3</td>
<td>*PSY 12000</td>
<td>Select from HSCI list</td>
</tr>
<tr>
<td>3</td>
<td>Elective</td>
<td>16</td>
<td>14</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credits</th>
<th>Fall 4th Year</th>
<th>Prerequisite</th>
<th>Credits</th>
<th>Spring 4th Year</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Science and Health Selective</td>
<td>3</td>
<td>Science and Health Selective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Science and Health Selective</td>
<td>3</td>
<td>HSCI HBSS Selective</td>
<td>Select from HSCI list</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>HSCI Selective</td>
<td>3</td>
<td>HSCI Selective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>English Selective</td>
<td>Select any 20000 or above ENGL course</td>
<td>3</td>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Elective</td>
<td>15</td>
<td>14-15</td>
<td>14-15</td>
<td></td>
</tr>
</tbody>
</table>

*Satisfies a University Core Requirement.

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

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.

Fall 2023