

|  | **School of Theoretical and Applied Science** |
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**Biology/Pre-Med Track**

**(for preparation to apply to Medical, Dental, Optometry and Podiatry programs)**

Recommended Four-Year Plan (Fall 2021)

The recommended four-year plan is designed to provide a blueprint for students to complete their degrees within four years. Students must meet with their Major Advisor to develop a more individualized plan to complete their degree. This plan assumes that no developmental courses are required. If developmental courses are needed, students may have additional requirements to fulfill which are not listed in the plan and may extend degree completion.

**NOTE:** This recommended Four-Year Plan is applicable to students admitted into the major during the 2021-2022 academic year.

| **First Year** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Fall Semester** | **HRS** | **✓** | **Spring Semester** | **HRS** | **✓** |
| BIOL 111 & BIOL 111L- Fundamentals of Biology I Lecture & Lab | 4+1 |  | BIOL 113 & BIOL 113L\* - Fundamentals of Biology II Lecture & Lab | 4+1 |  |
| Gen Ed: Scientific Reasoning - CHEM 116 & CHEM 116L - General Chemistry I Lecture & Lab | 4+1 |  | CHEM 117 & CHEM 117L**\***- General Chemistry II Lecture & Lab | 4+1 |  |
| Gen Ed: CRWT 102 - Critical Reading & Writing II | 4 |  | Gen Ed: Quantitative Reasoning - MATH 110 Precalculus^, MATH 121 Calculus I^, or CMPS 147 Computer Science I | 4 |  |
| **Gen Ed:** HNRS 101- Honors First Year Seminar | 4 |  | Gen Ed: Historical Perspectives | 4 |  |
|  |  |  | Career Pathways: PATH TS1 – Career Pathways Module 1 | **Degree Rqmt**. |  |
| **Total:** | 18 |  | **Total:** | 18 |  |

| **Second Year** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Fall Semester** | **HRS** | **✓** | **Spring Semester** | **HRS** | **✓** |
| BIOL 221\* - General Ecology | 4 |  | BIOL 332 & BIOL 332L\* - Genetics Lecture & Lab **WI** | 4+1.5 |  |
| CHEM 211 & CHEM 211L\* - Organic Chemistry I Lecture & Lab | 4+1 |  | CHEM 213 & CHEM 213L\* - Organic Chemistry II Lecture & Lab | 4+1 |  |
| MATH 122**\*** - Calculus IIor ENSC 345**\*** - Research Design & Statisticsor PSYC 242**\*** - Statistics | 4 |  | **Gen Ed:** HNRS 201- Honors Studies in the Arts & Humanities | 4 |  |
| **Gen Ed**: HNRS 110- Honors Social Science Inquiry | 4 |  | PSYCH 101 Intro to Psychology | 4 |  |
| Career Pathways: PATH TS2 – Career Pathways Module 2 | **Degree Rqmt.** |  | Career Pathways: PATH TS3 – Career Pathways Module 3 | **Degree Rqmt.** |  |
| **Total:** | 17 |  | **Total:** | 18.5 |  |

| **Third Year** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Fall Semester** | **HRS** | **✓** | **Spring Semester** | **HRS** | **✓** |
| BIOL 407 & BIOL 407L\* - Cell and Molecular Biology Lecture & Lab **WI** | 4+1.5 |  | CHEM 446 – Biochemistry II | 4 |  |
| PHYS 111-Fundamentals of Physics I & PHYS 118L-Introductory Physics I Lab | 4+1 |  | PHYS 113\* - Fundamentals of Physics II & PHYS 119L\* - Introductory Physics II Lab | 4+1 |  |
| CHEM 426 Biochemistry 1 | 4 |  | Bio Elective 2 | 4-5.5 |  |
| **Gen Ed**: HNRS 220 – Honors Global Awareness Seminar | 4 |  | **Gen Ed:** HNRS 325 – Honors Values and Ethics Seminar | 4 |  |
| **Total:** | 18.5 |  | **Total:** | 17-18.5 |  |

| **Fourth Year** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Fall Semester** | **HRS** | **✓** | **Spring Semester** | **HRS** | **✓** |
| Bio Elective 3 | 4-5.5 |  | Bio Elective 4 | 4-5.5 |  |
| BIOL 356\* - Evolution **WI** | 4 |  | Elective 3 | 4 |  |
| Gen Ed: Culture & Creativity, OR Systems Sustainability & Society | 4 |  | Elective 4 | 4 |  |
| HNRS 499 – Honors Independent Study (2 or 4 credit)\*\* | 4 |  | Elective 5 + | 4 |  |
| **Total:** | 16-17.5 |  | **Total:** | 16-17.5 |  |

The General Education courses can be taken in any sequence, not necessarily what is suggested here.

**Total Credits Required:** 128 credits

**GPA Required:** 2.0

\* This course has a pre-requisite. Please refer to the course catalog for information about pre-requisites.

\*\*While we recommend students take the “Honors Independent Study” (HNRS 499) Fall of their senior year, they are free to take it anytime junior year, senior year, or summer between those two years.

**#** Biology electives with Lab or Field experiences are up to to 5.5 credits. One of the four required Biology electives must include Lab or Field experience. Only one can be 200 level. BIOL 214/214L and BIOL 216/216L-Anatomy and Physiology I and II count as one elective. Students may also opt to choose BIOL 311/311L-Microbiology as an elective as that is a requirement for many professional programs. Some graduate professional programs require 2 psychology courses including PSYC 101 Intro to Psychology. Students are advised to speak to their advisor while planning their course of study so that those particular requirements can be met.

^ This course requires a CLM test for placement purposes.

+ Depending on the Biology electives selected, students may need to take a 5th Elective to reach 128 credits.

**WI: Writing Intensive-3 required in the major**

**This plan is designed to allow students to take all the required courses required for most medical and professional health schools.**