

## **School of Theoretical and Applied Science**

## **Biology/Pre-Med Track**

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

Recommended Graduation Plan (Fall 2025)

The recommended graduation plan is designed to provide a blueprint for students to complete their degrees on time. Students must meet with their Academic Advisor to develop a more individualized plan to complete their degree.

**NOTE:** This recommended Graduation Plan is applicable to students admitted into the major during the 2025-2026 academic year.

| CRWT Placement         |  |  |  |  |  |  |
|------------------------|--|--|--|--|--|--|
| CRWT 101 to CRWT 102   |  |  |  |  |  |  |
| CRWT 101S to CRWT 102S |  |  |  |  |  |  |

| Math Placement                           |  |  |  |  |  |  |  |
|------------------------------------------|--|--|--|--|--|--|--|
| MATH 021/022 to MATH 024 to MATH 110-121 |  |  |  |  |  |  |  |

NOTE: CRWT and MATH courses are determined by placement testing and should be taken following the sequence above.

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

| Second Year                                                                                         |                 |          |                                                               |                 |          |  |  |
|-----------------------------------------------------------------------------------------------------|-----------------|----------|---------------------------------------------------------------|-----------------|----------|--|--|
| Fall Semester                                                                                       | HRS             | <b>✓</b> | Spring Semester                                               | HRS             | <b>✓</b> |  |  |
| BIOL 221* - General Ecology                                                                         | 4               |          | BIOL 332 & BIOL 332L* - Genetics Lecture & Lab WI             | 4+1.5           |          |  |  |
| CHEM 211 & CHEM 211L* - Organic<br>Chemistry I Lecture & Lab                                        | 4+1             |          | CHEM 213 & CHEM 213L* - Organic<br>Chemistry II Lecture & Lab | 4+1             |          |  |  |
| MATH 122* - Calculus II or ENSC 345* -<br>Research Design & Statistics or PSYC 242* -<br>Statistics | 4               |          | General Education Requirement                                 | 4               |          |  |  |
| General Education Requirement                                                                       | 4               |          | PSYCH 101 Intro to Psychology                                 | 4               |          |  |  |
| Career Pathways: PATH TS2 – Career Pathways Module 2                                                | Degree<br>Rqmt. |          | Career Pathways: PATH TS3 – Career Pathways Module 3          | Degree<br>Rqmt. |          |  |  |
| Total:                                                                                              | 17              |          | Total:                                                        | 18.5            |          |  |  |

| Third Year                                                                    |       |   |                                                                                   |       |   |  |  |
|-------------------------------------------------------------------------------|-------|---|-----------------------------------------------------------------------------------|-------|---|--|--|
| Fall Semester                                                                 | HRS   | 1 | Spring Semester                                                                   | HRS   | 1 |  |  |
| BIOL 407 & BIOL 407L* - Cell and Molecular<br>Biology Lecture & Lab <b>WI</b> | 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 425 Biochemistry 1                                                       | 4     |   | Bio Elective 2                                                                    | 4-5.5 |   |  |  |

| General Education Requirement | 4    | General Education Requirement | 4       |  |
|-------------------------------|------|-------------------------------|---------|--|
| Total:                        | 18.5 | Total:                        | 17-18.5 |  |

| Fourth Year                                                     |         |          |                                                                 |         |          |  |  |
|-----------------------------------------------------------------|---------|----------|-----------------------------------------------------------------|---------|----------|--|--|
| Fall Semester                                                   | HRS     | <b>\</b> | Spring Semester                                                 | HRS     | <b>/</b> |  |  |
| Bio Elective 3                                                  | 4-5.5   |          | Bio Elective 4                                                  | 4-5.5   |          |  |  |
| BIOL 356* - Evolution WI                                        | 4       |          | Free Elective (minor, certificate, or second major requirement) | 4       |          |  |  |
| General Education Requirement                                   | 4       |          | Free Elective (minor, certificate, or second major requirement) | 4       |          |  |  |
| Free Elective (minor, certificate, or second major requirement) | 4       |          | Free Elective (minor, certificate, or second major requirement) | 4       |          |  |  |
| Total:                                                          | 16-17.5 |          | Total:                                                          | 16-17.5 |          |  |  |

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**Total Credits Required:** 128 credits

**GPA Required:** 2.0

**General Education courses** can be done in any order with the exception of INTD 101, CRWT and MATH. Those three general education courses will need to be done first. First Year Seminar is taken in the first semester. Failure to complete CRWT and MATH will result in a hold when the student hits 64 credits. The following general education courses can be done in any order. For more info on these courses, please visit the General Education program requirements website in the College Catalog:

- Social Science Inquiry (SOSC 110) [+W]
- Scientific Reasoning
- Historical Perspectives [+W]
- Studies in the Arts & Humanities (CRWT 102 is a prerequisite to this course) [+W]
- Global Awareness [+W]
- Distribution Category (Social Systems, & Society OR Culture & Creativity OR Values and Ethics) (Must be outside of TAS)
- Distribution Category
- +W: Students transferring in with 48 or more credits are waived from these general education requirements.
- \* This course has a pre-requisite. Please refer to the course catalog for information about pre-requisites.
- \*\*Gen Ed Distribution Categories: two of the three categories are required. One course must be outside of the School of Theoretical and Applied Science.

# Biology electives with Lab or Field experiences are up 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.

+ Depending on the Biology electives selected, students may need to take a 5<sup>th</sup> 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. Students are encouraged to visit the websites of specific graduate and/or professional programs that they are considering to ensure that they fulfil the specific requirements for admission to those programs.

<sup>&</sup>lt;sup>^</sup> This course requires a CLM test for placement purposes.