

### Biology: Pharmacy (Joint LECOM\*\*\*) 3+4 Track

Recommended Four-Year Plan (Fall 2023)

The recommended four-year plan is designed to provide a blueprint for students to complete their degrees within four years. These plans are the recommended sequences of courses. 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.

**NOTE:** This recommended Four-Year Plan is applicable to students admitted into the major during the 2023-2024 academic year.

First Year					
Fall Semester	HRS	✓	Spring Semester	HRS	✓
Gen Ed: INTD 101-First Year Seminar	4		BIOL 113-Fundamentals of Biology II*^	4	
Gen Ed Scientific Reasoning - CHEM 116-General Chemistry I Lecture^	4		BIOL 113L-Fundamentals of Biology II Lab^	1	
Gen Ed Scientific Reasoning - CHEM 116L-General Chemistry I Lab^	1		CHEM 117-General Chemistry II Lecture*^	4	
BIOL 111-Fundamentals of Biology I Lecture^	4		CHEM 117L-General Chemistry II Lab^	1	
BIOL 111L-Fundamentals of Biology I Lab^	1		Gen Ed Quantitative Reasoning - MATH 121-Calculus I or MATH 110-Precalculus	4	
Gen Ed: CRWT 102-Critical Reading & Writing II^	4		Gen Ed: SOSC 110-Social Science Inquiry**^	4	
			Career Pathways: PATH TS1 – Career Pathways Module 1	<b>Degree Rqmt.</b>	
<b>Total:</b>	18		<b>Total:</b>	18	

Second Year					
Fall Semester	HRS	✓	Spring Semester	HRS	✓
CHEM 211-Organic Chemistry I Lecture^	4		BIOL 332-Genetics Lecture (WI) *	4	
CHEM 211L-Organic Chemistry I Lab^	1		BIOL 332L-Genetics Lab	1.5	
BIOL 311-Microbiology Lecture	4		ENSC 345-Research Design and Statistics^ or PSYC 242 Statistics^	4	
BIOL 311L-Microbiology Lab	1.5		Gen Ed: Historical Perspectives **^	4	
ECON 101 or 102 – Economics^	4		CHEM 213-Organic Chemistry II Lecture^	4	
Gen Ed: AIID 201-Studies in the Arts and Humanities or HNRS 201-Honors Studies in the Arts and Humanities**^	4		CHEM 213L-Organic Chemistry II Lab^	1	
Career Pathways: PATH TS2 – Career Pathways Module 2	<b>Degree Rqmt.</b>		Career Pathways: PATH TS3 – Career Pathways Module 3	<b>Degree Rqmt.</b>	
<b>Total:</b>	18.5		<b>Total:</b>	18.5	

### Third Year

Fall Semester	HRS	✓	Spring Semester	HRS	✓
PHYS 111-Fundamentals of Physics I <sup>^</sup>	4		PHYS 113-Fundamentals of Physics II Lecture*	4	
PHYS 118L-Introductory Physics I Lab <sup>^</sup>	1		PHYS 119L-Introductory Physics II Lab	1	
BIOL 221-General Ecology	4		Gen Ed: Culture & Creativity, Systems Sustainability & Society, or Values & Ethics** <sup>^</sup>	4	
BIOL 407-Cell and Molecular Biology Lecture (WI)	4		BIOL 356-Evolution (WI)	4	
BIOL 407L-Cell and Molecular Biology Lab	1.5		Gen Ed: Culture & Creativity, Systems Sustainability & Society, or Values & Ethics** <sup>^</sup> ( <b>Must be outside of TAS</b> )	4	
Gen Ed: Global Awareness** <sup>^</sup>	4				
<b>Total:</b>	18.5		<b>Total:</b>	17	

<b>Fourth Year</b>
<b>Lake Erie College of Medicine (Pharmacy)</b>

**Total Credits Required: 128**

**Science Classes GPA: 3.2**

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

\*Pre-requisite for Biology elective is at least a "C" grade in BIOL110 and BIOL112.

\*\*Admissions Early Acceptance Program

\*\*\*Lake Erie College of Medicine

<sup>A</sup>This course requires a CLM test for placement purposes.

<sup>B</sup>If needed.

<sup>C</sup> If Pre-Calculus is taken then a summer course would be needed between the First and Second year

WI: Writing Intensive-3 required in the major

<sup>^</sup>No grade lower than C accepted