

# BIOLOGY / PRE-PHARMACY (LECOM) (2+3)

The Lake Erie College of Osteopathic Medicine (LECOM) School of Pharmacy and Slippery Rock University (SRU) are committed to the training of future pharmacy practitioners. Slippery Rock University and LECOM School of Pharmacy offer an accelerated, five-year Doctor of Pharmacy program. Under this joint agreement students will successfully complete the two-year undergraduate program in pre-pharmacy at SRU and then matriculate into LECOM School of Pharmacy to complete the professional curriculum of the Doctor of Pharmacy degree (Pharm.D) in three years. The accelerated professional pharmacy curriculum at LECOM School of Pharmacy is offered in a 12-month program per academic year. Students participating in this program will not be awarded a Slippery Rock University degree.

For more information on admission requirements: <https://lecom.edu/admissions/entrance-requirements/early-acceptance-programs/>

## Program Learning Outcomes

- **Critical Thinking/Problem Solving:** Respective program graduates should demonstrate synthetic, analytical, and interpretive skills.
- **Knowledge/Content:** Graduates should demonstrate that they are founded in the discipline at the molecular, cellular, organismal, population, community, and ecosystem levels and that they have a fundamental understanding of chemistry, physics, and mathematics.
- **Practical Skills:** Graduates will demonstrate proficiency in laboratory related skills.
- **Communication Skills:** Respective program graduates should demonstrate strong oral, digital, and written communication skills.
- **Professional Attitude:** Graduates demonstrate professional attitude, behavior, and ability to interact with people from diverse backgrounds and cultures.
- **Degree Program Writing Competency:** Graduates will demonstrate proficiency in writing based on longitudinal data as opposed to point in time data.

## Related Links

Biology - LECOM Pre-Pharmacy, BS Program Page ([https://www.sru.edu/academics/majors-and-minors/biology-pre-pharmacy-23-\(lecom\)/](https://www.sru.edu/academics/majors-and-minors/biology-pre-pharmacy-23-(lecom)/))

Biology Department Page (<https://www.sru.edu/academics/colleges-and-departments/ches/departments/biology/>)

Professional Licensure/Certification Page (<https://www.sru.edu/students/student-consumer-information/professional-licensure/>)

## Curriculum Guide

### GPA Requirement

Overall GPA: 3.4 or higher  
Science GPA: 3.4 or higher  
Math GPA: 3.4 or higher

### Summary

Code	Title	Hours
	Other Basic Requirements	0-3
	Computer Competency	0-3

Major Requirements/Concentration	65
Natural Science and Math College-Wide Requirements	12
Electives	58

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Code	Title	Hours
Complete one of the following:		0-3
Meet required minimum SAT or ACT math score OR		
ESAP 110	Beginning Algebra	
<b>Total Hours</b>		<b>0-3</b>

### Computer Competency

Code	Title	Hours
Demonstrate "computer competency" by one of the following:		0-3
Pass Computer Competency Exam OR		
Select one of the following at SRU or another post-secondary institution:		
CPSC 100	Introduction to Computing for Liberal Arts	
CPSC 110	Computer Concepts	
CPSC 130	Introduction to Computing and Programming	
PE 202	Technology for Wellness	
<b>Total Hours</b>		<b>0-3</b>

### Biology Program Requirements

- Students desiring a Biology Major must maintain at least a 2.000 average in Biology.
- Before progressing to a 200-level course, students must achieve a 2.000 average in Principles of Biology - BIOL 104
- Students may register in 200-level courses in any order, but must maintain a Biology average of 2.000 or better and must complete the 200 core sequence before progressing to 300 and 400-level courses in the major.
- A student must repeat any 200-level course that brings the Biology average below a 2.000.
- Students should complete all 200-level Biology requirements by the end of their sophomore year.
- If you have questions about Financial Aid, visit their website (<https://www.sru.edu/admissions/financial-aid/>).
- To view the SRU policy on senior undergraduate students earning graduate credit, click here (<https://catalog.sru.edu/undergraduate/academic-policies/senior-undergraduate-students-earning-graduate-credit/>).

### LECOM - Pre-Pharmacy Requirements

Code	Title	Hours
<b>Required Courses</b>		
BIOL 104	Principles of Biology with Lab	4
BIOL 250	Genetics with Lab	4
BIOL 325	Biometry with Lab	3
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1

CHEM 108	General Chemistry II	3
CHEM 112	General Chemistry II Lab	1
CHEM 201	Organic Chemistry I	3
CHEM 211	Organic Chemistry Laboratory I	1
CHEM 202	Organic Chemistry II	3
CHEM 212	Organic Chemistry Laboratory II	1
COMM 200	Civil Discourse: Theory & Practice	3
CPSC 110	Computer Concepts	3
ENGL 102	Critical Writing	3
ENGL 205	Introduction to Professional Writing	3
MATH 225	Calculus I	4
PHYS 211	General Physics I with Lab	4
Subtotal		47
<b>Economics Course</b>		
ECON elective		3
Subtotal		3
<b>Psychology Course</b>		
PSYC elective		3
Subtotal		3
<b>Psychology or Sociology Course</b>		
Select one of the following:		3
PSYC elective		
INDP 201	Principles of Sociology	
Subtotal		3
<b>General Electives</b>		
Select nine credits		9
Subtotal		9
<b>Total Hours</b>		<b>65</b>

### Natural Science and Math College-Wide Requirements

Code	Title	Hours
Students must take the following four courses:		
CHEM 107	General Chemistry I	3
CHEM 111	General Chemistry I Lab	1
MATH 225	Calculus I	4
PHYS 211	General Physics I with Lab	4
<b>Total Hours</b>		<b>12</b>

DEPARTMENT OF BIOLOGY (61LP)  
PRE PHARMACY (LECOM) PROGRAM  
This program is effective as of Fall 2003.  
Revised 8-2018

### Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

### RECOMMENDED two-YEAR PLAN

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
BIOL 104	Principles of Biology with Lab	4
CHEM 107 & CHEM 111	General Chemistry I and General Chemistry I Lab	4
ENGL 102	Critical Writing	3
INDS 101	FIRST Seminar *	1
MATH 225	Calculus I	4
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
BIOL 250	Genetics with Lab	4
CHEM 108 & CHEM 112	General Chemistry II and General Chemistry II Lab	4
ENGL 205	Introduction to Professional Writing	3
CPSC 110	Computer Concepts	3
Elective		3
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
Select one of the following:		3
COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	
CHEM 201 & CHEM 211	Organic Chemistry I and Organic Chemistry Laboratory I	4
PHYS 201	Elements of Physics I with Lab	4
Electives		6
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
Economics Elective		3
CHEM 202 & CHEM 212	Organic Chemistry II and Organic Chemistry Laboratory II	4
Psychology Elective		3
Behavioral Science Elective		3
BIOL 325	Biometry with Lab	3
<b>Hours</b>		<b>16</b>
<b>Total Hours**</b>		<b>66</b>

<sup>1</sup> Work with your Academic Adviser to declare a Thematic Thread by the end of your fall semester in your second year. Click **here** to declare a thread.

\* Students are encouraged to take INDS 101 as a Free Elective.

Major Code: 61LP  
Revised date: 07.14.2021

\*\* This document is meant to serve as a guide. Some planners may show more than 120 credits because faculty have created flexibility in choosing courses. However, only 120 credits are required to obtain a degree. Please consult with your academic adviser and refer to your curriculum guide prior to registering for courses. This plan should be reviewed, and verified, by you and your academic adviser at least once each academic year.