

Bachelor of Science in Biology (122Cr.)

Four-Year Curriculum Plan

Suggested four-year plan for freshmen entering LMU Fall semester. Always consult LMU's Undergraduate Catalog and discuss with your academic advisor every semester prior to registering for classes. Timing of courses may deviate from this plan based on a number of

First Year — Fall Semester	Cr.
ENGL 101 Composition I*	3
UACT 100 Strategies for College Success*	1
BIOL 111 General Biology I & Lab*# Prerequisite: Successful Completion (C- or better) BIOL 100, placement in ENGL 101, OR ACT/SAT reading/verbal score of 23	4
MATH 150 Calculus I ^{#*} Prerequisite: Successful completion (C- or better) of MATH 120 or ACT subscore of 26 or higher	4
CHEM 111 General Chemistry I & Lab [#] Prerequisite: Successful completion (C ⁻ or better) of Math 105, 115, or 120, OR Math ACT sub-score of 23 higher, Fall	4

Total Credits

You should be exploring opportunities to participate in service initiatives Have you joined a club? Think about pre-med or the Wildlife Society

Second Year — Fall Semester	Cr.
Ethics, Fine Arts, Humanities*	3
COMM 200 Fund Speech and Comm.*	3
Prerequisite for BIOL 380	
CHEM 221 Organic Chemistry I & Lab#	4
Prerequisite: Successful completion (C- or better) of CHEM 112 with lab, Fall	
PHYS 211 General Physics I & Lab [#]	4
Prerequisite: Successful completion (C- or better) in MATH 120, or a Math ACT sub-score of 26 or higher, Fall	
9 .	1
BIOL 290 Writing in the Life Sciences#	1
Prerequisite: Successful completion (C- or better) in ENGL 102	
Total Credits	15

You should be exploring career opportunities and internships Keep track of the number of 300/400 level courses you take. You need to complete at least 36 credits for graduation

Third Year — Fall Semester	Cr.
History Requirement*	3
Elective-Any course of your choice	3
BIO 310 Comparative Vert. Anat Lab#	4
Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs and CHEM 111 and 112 with labs, Fall	
BIOL 370 Ecology & Lab#	4
Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Fall	
BIOL 397/X JR Sc Sem and Writing#	1

Total Credits 15

Explore opportunities for internships or research experiences Explore career interest and determine qualifications. Begin to plan how you will obtain these qualifications

Fourth Year — Fall Semester	Cr.
Elective-Any course of your choice	3
CIVX 300 American Civics*	2
Track Elective Course (3-4 cr)# See page 2 for choices	4
Invertebrate Option#	4
BIOL 483 Research in Biology#	1

Total Credits

- Complete the Intent to Graduate form during your Academic Advising Meeting.
- Apply to graduate/professional program, if applicable
- Look for opportunities to present research
- Explore job opportunities in your career

First Year — Spring Semester	Cr.
ENGL 102 Composition II*	3
LNCN 100 Lincoln's Life & Legacy*	1
BIOL 112 General Biology II & Lab*# Prerequisite: Successful completion (C: or better) of BIOL 111 with lab	4
CHEM 112 General Chemistry II & Lab*# Prerequisite: Successful completion (C- or better) of CHEM 111, Spring	4
MATH 270 Probability and Statistics [#] Prerequisite for BIOL 380	3

Total Credits 15

Think about how you can explore career options during the summer

Second Year — Spring Semester	Cr.
HIST Requirement*	3
CHEM 222 Organic Chemistry II & Lab# Prerequisite: Successful completion (C- or better) of CHEM 221 with lab, Spring	4
Behavior or Social Science Requirement*	3
BIOL 380 Research Design & Analysis [#] Pre-requisite: Successful completion (C- or better) of MATH 270 and BIOL 111 and 112 with labs	3
BIOL 315 Molecular Genetics & Lab [#] Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs and CHEM 111 with lab	4

Total Credits 17

Narrow down career options. Gather information on what is needed to achieve those careers, i.e. internships, experience, professional/graduate school (will require an entrance exam)

Third Year — Spring Semester	Cr.
Ethics Option#	3
Choose BIOL 320 or 330 Botany & Lab [#] Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Spring	4
BIOL 336 General Microbiology & Lab [#] Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs and CHEM 111 and 112 with labs, Spring	4
Any electives of your Choice	5

Total Credits 16

- Apply for summer internships or research experiences.
- Make plans to study for and take professional/graduate school entrance exams, if applicable

Fourth Year — Spring Semester	Cr.
Elective - Any course of your choice	6
Track Elective Course (3-4 cr)# See page 2 for choices	4
BIOL 410 Evolution#	3
Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Spring odd years	
BIOL 497/X Sr Science Sem & Writing [#]	1
Prerequisite: Successful completion (C- or better) of BIOL 397	
Total Credits	14

- Look for opportunities to present research
- . Apply to jobs in career interest, if entering the workforce

*LMU Core Curriculum Requirement: See LMU undergraduate catalog for details

Major-Specific Requirement/Collateral Requirement: These courses must be passed with at least a C- or better to progress in the program. See LMU catalog for specific grade requirements.

Course Options for Program Track Electives

*If there is a corresponding lab, students must take the lab.
*A course cannot count for plant diversity or invertebrate option and upper-level elective

Ethics Options Must select <i>one</i> of the following courses	Cr.
BIOL 224 Ethics in Life Science	3
PHIL 330 Ethics	3
PHIL 430 Medical Ethics	3
Prerequisite: Successful completion (C- or better) of ENGL 240 or 250	
Must be passed with a C- or better to progress in the program.	

Upper-Level Track Electives Select eight credit hours from the following courses	Cr.
BIOL 320 Principles of Botany	4
BIOL 330 Field Botany	4
Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Fall	
BIOL 334 General Histology	2
Prerequisite: Successful completion (C- or better) of BIOL 311 with lab, Spring BIOL 340 Invertebrate Zoology	4
BIOL 350 Entomology	4
o.	3
BIOL 360 Immunology Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs and CHEM 111 and 112 with labs, Fall	3
BIOL 365 General Physiology	4
BIOL 395 and 495 Special Topics	4
BIOL 441 and 442 Biochemistry I&II	4
Prerequisite: Successful completion (C- or better) of BIOL 111 with lab and CHEM 221 and 222 with labs, Fall	
BIOL 430 Topics in Microbiology	3
BIOL 450 Molecular Cell Biology	3
BIOL 460 Development in Biology	3
BIOL 483 Research in Biology	1
VHS 300 Vet. Parasitology and Entomology	4
CBIO 330 Ichthyology	4
Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Fall odd years	4
CBIO 340 Herpetology	4
Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Spring odd years	
CBIO 350 Ornithology	4
Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Spring even years	
CBIO 360 Mammalogy	4
Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Fall even years	
CBIO 420 Wetland Ecosystems Prerequisite: Successful completion (C- or better) of BIOL 370 with lab, Fall odd years	3
CBIO 430 Terrestrial Ecosystems	3
Prerequisite: Successful completion (C- or better) of BIOL 370 with lab, Spring even years	5
CBIO 440 Freshwater Ecosystems	3
Prerequisite: Successful completion (C- or better) of BIOL 370 with lab, Spring odd years	

- If the course has a corresponding laboratory course, the laboratory course MUST be taken
- Must be passed with a C- or better to progress in the program.

Invertebrate Options Must select one of the following courses	Cr.
BIOL 340 Invertebrate Zoology Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Fall odd years	4
BIOL 350 Entomology Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Fall even years	4
VHS 300 Vet Parasitology & Entomology Prerequisite: BIOL 112; Junior Standing, Fall	4
 If the course has a corresponding laboratory course, the laboratory course MUST taken 	be

Must be passed with a C- or better to progress in the program.

Botany Options Must select <i>one</i> of the following courses	Cr.
BIOL 320/L Principles of Botany	4
BIOL 330/L Field Botany	4
Prerequisite: Successful completion (C- or better) of BIOL 111 and 112 with labs, Fall	

Credit Hour Requirements

In order to graduate you need to complete a minimum of 122 credit hours. At least 36 of these hours must be at the 300/400 level. Track your hours in each of these categories as you progress to ensure timely completion of the program.

Semester	# of credit hours				
	Current semester	300/400	Total Earned (Add all semesters)	Total 300/400 (Add all semesters)	Cumulative GPA
1 st Yr. Fall					
1 st Yr. Spring					
2 nd Yr. Fall					
2 nd Yr. Spring					
3 rd Yr. Fall					
3 rd Yr. Spring					
4 th Yr. Fall					
4 th Yr. Spring					