

BIOLOGY MAJOR ADVISING SHEET

Website: <http://www.luc.edu/biology/>

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B.S. General Biology*

- 101/111 & 102/112 - General Biology I & II
- 251 - Cell Biology
- 265 - Ecology
- 282 - Genetics
- Labs: one of 252, 266, or 283.
- Biology Electives: 19 credits including two additional lab components and 9 biology credits at 300-level.

* 37 Biology credit hours

B.S. Biology:

Ecology Emphasis*

- 101/111 & 102/112 - General Biology I & II
- 251 - Cell Biology
- 265 - Ecology
- 266 - Ecology Lab
- 282 - Genetics
- 319 - Evolution
- Biology electives: 16 credits including two "ecology" courses, two additional lab components, and 6 biology credits at the 300-level.

* 37 Biology credit hours

B.S. Biology:

Molecular Biology Emphasis*

- 101/111 & 102/112 - General Biology I & II
- 251 - Cell Biology
- 265 - Ecology
- 282 - Genetics
- 283 - Genetics Lab
- 366/CHEM 361 - Biochemistry
- One of: 382, 387 or 388 (Advanced molecular topics).
- One Lab from: 366L, 390, 391, 396, 397, 398. (1-5 credits).
- Molecular electives: 9 to 13 credits including one additional lab component.

* 37 Biology credit hours

ANCILLARY REQUIREMENTS FOR BIOLOGY MAJORS

- All Biology majors require a minimum of 5 laboratory courses: Biology 111, 112, (one of 252 or 266 or 283) and two Biology electives must have laboratory components.
- All Biology Majors require at least 9 Biology credits at the 300 level.
- Students may earn a maximum of 2 credits of Biology 296 (Introduction to Research) toward their Biology Major/Minor.
- Student may take either Biology 396 (Research) or 397 (Honor's Research) but not both.

Ancillary Course Requirements

A. Chemistry (16 credits)

- 101/111 & 102/112 (or 105 and 106) - General Chemistry I & II with labs (8)
- 223/225 & 224/226 (or 221 and 222) - Organic Chemistry I & II with labs (8)

B. Physics (8 credits)

- 111/111L & 112/112L (or 125/125L and 126/126L) - College Physics with labs

C. Mathematics (6 credits)

- 131 and 132 (or 161 and 162) - Calculus
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THE BIOLOGY MINOR

24 credits of Biology course work:

- Biology 101 & 111 (4)
- Biology 102 & 112 (4)
- Biology 251 (3), 265 (3) & 282 (3)
- 7 Additional credits of Biology course work

BIOLOGY MAJORS: 4 YEAR SCHEDULE OF CLASSES

(These schedules are only suggestions. You may need to alter your choices based on availability of courses each semester. Meet with your Academic and Major Advisor regularly if you have questions.)

I. B.S. Biology – Suggested Sequence of Courses

First-Year Students Qualifying for Calculus (Math 131)			
1 st Year - First Semester	Credits	Second Semester	Credits
Biology 101 & 111	3 + 1	Biology 102 & 112	3 + 1
Chemistry 101 & 111	3 + 1	Chemistry 102 & 112	3 + 1
Math 131	3	Math 132	3
College Writing: UCWR 110	3	University Core (1)	3
UNIV 101	1	UNIV 102	1
Semester Totals	15	Semester Totals	15
2 nd Year - First Semester		Second Semester	
Biology 282 or 251	3	Biology 251 or 282	3
Biology 283 or 252	1	Chemistry 224 & 226	3 + 1
Chemistry 223 & 225	3 + 1	University Core (5)	3
University Core (2)	3	University Core (6)	3
University Core (3)	3	University Core (7)	3
University Core (4)	3		
Semester Totals	17	Semester Totals	16
3 rd Year - First Semester		Second Semester	
Biology 265	3	Biology Elective (+Lab)	4
Physics 111 & 131	3 + 1	Biology Elective	3
University Core (8)	3	Physics 112 & 132	3 + 1
University Core (9)	3	University Core (11)	3
University Core (10)	3	University Core (12)	3
Semester Totals	16	Semester Totals	17
4 th Year - First Semester		Second Semester	
Biology Elective (+Lab)	4	Biology Electives	5
Biology Elective	3	University/Biology Electives	3
University/Biology Electives	6	University/Biology Electives	3
Semester Totals	13	Semester Totals	11
		CAREER TOTAL	120

II. B.S. Biology – Suggested Sequence of Courses

First-Year Students <u>Not</u> Placing in Calculus (Math 131)			
1 st Year - First Semester	Credits	Second Semester	Credits
Biology 101 & 111	3 + 1	Biology 102 & 112	3 + 1
Math (100 or 117 or 118)	3	Math 117 or 118	3
College Writing: UCWR 110	3	University Core (2)	3
UNIV 101	1	University Core (3)	3
University Core (1)	3	UNIV 102	1
Semester Totals	14	Semester Totals	14
2 nd Year - First Semester		Second Semester	
Biology Elective** (*Not requiring General Chemistry I & II)	3	Biology Elective** (*Not requiring General Chemistry I & II)	3
Chemistry 101 & 111	3 + 1	Chemistry 102 & 112	3 + 1
Math 131	3	Math 132	3
University Core (4)	3	University Core (6)	3
University Core (5)	3	University Core (7)	3
Semester Totals	16	Semester Totals	16
3 rd Year - First Semester		Second Semester	
Biology 282 or 251	3	Biology 251 or 282	3
Biology 283 or 252	1	Biology 265	3
Chemistry 223 & 225	3 + 1	Chemistry 224 & 226	3 + 1
Physics 111 & 131	3 + 1	Physics 112 & 132	3 + 1
University Core (8)	3		
Semester Totals	15	Semester Totals	14
4 th Year - First Semester		Second Semester	
Biology Elective (+Lab)	4	Biology Electives (+Lab)	4
Biology Elective	3	Biology Elective	2
University Core (9)	3	University Core (12)	3
University Core (10)	3	University/ Biology Electives	3
University Core (11)	3	University or Biology Electives	3
Semester Totals	16	Semester Totals	15
			CAREER TOTAL
			120

III. B.S. Biology with Molecular Biology Emphasis

Suggested Sequence of Courses			
1st Year - First Semester	Credits	Second Semester	Credits
Biology 101 & 111	3 + 1	Biology 102 & 112	3 + 1
Chemistry 101 & 111	3 + 1	Chemistry 102 & 112	3 + 1
Math 131	3	Math 132	3
College Writing: UCWR 110	3	University Core (1)	3
UNIV 101	1	UNIV 102	1
Semester Totals	15	Semester Totals	15
2nd Year - First Semester		Second Semester	
Biology 282	3	Biology 251	3
Biology 283	1	Chemistry 224 & 226	3 + 1
Chemistry 223 & 225	3 + 1	University Core (5)	3
University Core (2)	3	University Core (6)	3
University Core (3)	3	University Core (7)	3
University Core (4)	3		
Semester Totals	17	Semester Totals	16
3rd Year - First Semester		Second Semester	
Biology 366/CHEM 361	3	Biology 382 or 387 or 388	3
Biology 265	3	Molecular Biology Elective	3
Physics 111 & 131	3 + 1	Physics 112 & 132	3 + 1
University Core (8)	3	University Core (10)	3
University Core (9)	3	University Core (11)	3
Semester Totals	16	Semester Totals	16
4th Year - First Semester		Second Semester	
Molecular Biology Lab Options	2-5	Molecular Biology Elective (+Lab)	2-5
Molecular Biology Elective	3	University/Biology Elective	3
University Core (12)	3	University/Biology Elective	3
University or Biology Elective	3	University/Biology Elective	3
Semester Totals	11-14	Semester Totals	14-11
			CAREER TOTAL
			120

IV. B.S. Biology with Ecology Emphasis

Suggested Sequence of Courses			
1 st Year - First Semester	Credits	Second Semester	Credits
Biology 101 & 111	3 + 1	Biology 102 & 112	3 + 1
Math (118-131)	3	Math (131 or 132)	3
Chemistry 101 & 111	3 + 1	Chemistry 102 & 112	3 + 1
College Writing: UCWR 110	3	University Core (1)	3
UNIV 101	1	UNIV 102	1
Semester Totals	15	Semester Totals	15
2 nd Year - First Semester		Second Semester	
Biology 265	3	Biology 282	3
Biology 266	1	Chemistry 224 & 226	3 + 1
Math 132 (If needed)	3	University Core (3/4)	3
Chemistry 223 & 225	3 + 1	University Core (4/5)	3
University Core (2±3)	3 (+3)	University Core (5/6)	3
Semester Totals	14-17	Semester Totals	16
3 rd Year - First Semester		Second Semester	
Biology 319	3	Biology 251	3
Physics 111 & 131	3 + 1	Biology/Ecology Elective	3
University Core (6/7)	3	Physics 112 & 132	3 + 1
University Core (7/8)	3	University Core (9/10)	3
University Core (8/9)	3	University Core (10/11)	3
Semester Totals	16	Semester Totals	16
4 th Year - First Semester		Second Semester	
Biology/Ecology Elective	3	Biology Electives (+Lab)	4
Biology Elective (+Lab)	4	Biology Elective	2
University Core (11/12)	3	University Core (12)	3
University/Biology Elective	3	University/Biology Elective	3
(University/Biology Elective)	(3)		
Semester Totals	13-16	Semester Totals	12
			CAREER TOTAL
			120