

MAJOR SEQUENCE AND DEGREE REQUIREMENTS

Major: **BS BIOLOGY**

Option: **PLANT SCIENCES**

Total Requirements: **76 credits**

course	cr	grade	course	cr	grade		
BIOLOGY CORE (25-26 credits)			RELATED CORE (24 credits)¹				
BIOL 101	Foundations of Biology	4	—	CHEMISTRY: CHEM 111	Introductory Chemistry I	4	—
BIOL 211	Concepts of Zoology	4	—	CHEM 112	Introductory Chemistry II	4	—
BIOL 221	Concepts of Botany	4	—	CHEM 235 (or 231 plus 232) ²	Organic Chem.	4	—
BIOL 343	Principles of Ecology & Evolution	4	—	COMPUTATIONAL: MATH 151 (or 161)	Calculus	4	—
BIOL 362	Cell & Developmental Biology	4	—	PHYSICS: PHYS 131 (or PHYS 231) ²	Physics I	4	—
BIOL 364	Genetics & Molecular Biology	4	—	PHYS 132 (or PHYS 232) ²	Physics II	4	—
BIOL 472	Seminar	1-2	—				
PRACTICAL EXPERIENCE (1-3 credits)							
Choose 1-3 credits from the following in Botany, Horticulture, Plant Biotech/Molecular, or Plant Ecology/Environmental							
BIOL 300	Co-op/Internship	3	—				
BIOL 498	Independent Study	1	—				
BIOL 489	Honors Independent Study	1	—				
BIOL 499	Honors Thesis	1	—				

IN ADDITION TO THE ABOVE, COMPLETE ONE OF THE FOLLOWING COURSE SEQUENCES TO REACH 76 CREDITS

BOTANY	HORTICULTURAL SCIENCE
ADVANCED PLANT SCIENCE (9 credits)	ADVANCED PLANT SCIENCE (9 credits)
Choose three from: ³ BIOL 325 Plant Systematics (recommended)	Take this course: BIOL 327 Horticultural Science
BIOL 327 Horticultural Science	Choose two from: ³ BIOL 325 Plant Systematics
BIOL 329 Plant-Insect Interactions	BIOL 329 Plant-Insect Interactions
BIOL 424 Mycology	BIOL 424 Mycology
BIOL ELECTIVES (7-10 credits)	BIOL ELECTIVES (1-4 credits)
Courses ⁴ approved for BIOL majors: BIOL _____	Courses ⁴ approved for BIOL majors: BIOL _____
BIOL _____	BIOL _____
BIOL _____	Recommended: BIOL 375, 416, or 461
BIOL _____	
ADDITIONAL RELATED (7 credits)	ADDITIONAL RELATED (13 credits)
CHEMISTRY: ⁵ BIOL 324 or CHEM 326 (or CHEM 375)	CHEMISTRY: ⁵ BIOL 324 or CHEM 326
COMPUTATIONAL: BIOL 375 (or AENG 140, BUAD 231 ⁶ , CSCI 161, GEOG 295 ⁷ , MATH 235, or PSYC 211) ²	BIOTECH ENGINEERING: AENG 140
	MARKETING: ⁸ BUAD 231 ⁶
	MKTG 332 or MKTG 335
PLANT BIOTECH & MOLECULAR	PLANT ECOLOGY & THE ENVIRONMENT
ADVANCED PLANT SCIENCE (9 credits)	ADVANCED PLANT SCIENCE (9 credits)
Choose three from: ³ BIOL 325 Plant Systematics	Take this course: BIOL 325 Plant Systematics
BIOL 327 Horticultural Science	Choose two from: ³ BIOL 327 Horticultural Science
BIOL 329 Plant-Insect Interactions	BIOL 329 Plant-Insect Interactions
BIOL 424 Mycology	BIOL 424 Mycology
ADVANCED MOLECULAR BIOLOGY (4 credits)	
BIOL 462 Molecular Biology	
BIOL ELECTIVES (0-3 credits)	BIOL ELECTIVES (0-3 credits)
Courses ⁴ approved for BIOL majors: BIOL _____	Courses ⁴ approved for BIOL majors: BIOL _____
BIOL _____	BIOL _____
ADDITIONAL RELATED (10 credits)	ADDITIONAL RELATED (14 credits)
CHEMISTRY: ⁵ BIOL 324 or CHEM 326	CHEMISTRY: ⁹ BIOL 324 or CHEM 326 or CHEM 375
BIOTECH ENGINEERING: AENG 140	COMPUTATIONAL: CSCI 161
COMPUTATIONAL: BIOL 375 (or CSCI 161 or MATH 235 or PSYC 211) ²	BIOL 375 (or MATH 235 or PSYC 211) ²
	GEOGRAPHIC INFORMATION SYSTEMS: GEOG 295 ⁷

¹ Completion of this Related Core will also satisfy your three G2 and your one Mathematics Foundations for Lifelong Learning Gen Ed requirements.

² Any courses listed in parentheses are pre-approved course substitutions for the preceding required course. However, any differences in credit number do not affect the minimum number of BIOL elective credits.

³ Other advanced plant-related credits may be chosen in consultation with one's academic advisor.

⁴ These are BIOL major electives in the true sense: any course approved for BIOL majors will count here, so long as it had not been used to fill requirements elsewhere in the Major. For example, if Mycology (BIOL 424) or Biometry (BIOL 375) will not be used to satisfy any of the ADVANCED PLANT SCIENCE or COMPUTATIONAL credits, respectively, then they or some other such course approved for BIOL majors could count here.

⁵ Students may obtain a CHEM minor with CHEM 326 and then also CHEM 265. BIOL 324 could then be taken as Advanced Plant Science if desired.

⁶ Pre-requisites are ECON 101 & 102, which will also count for two of your three General Education G3 courses.

⁷ Pre-requisite is GEOG 281, which will also count for one of three General Education G3 courses.

⁸ Students may obtain a Certificate in Marketing by taking BUAD 231, MKTG 332, MKTG 335 and 2 additional MKTG courses.

⁹ Students may obtain a CHEM minor with CHEM 326 or CHEM 375 and then also CHEM 265. BIOL 324 could then be taken as Advanced Plant Science if desired.