Bachelor of Science in Biology:
Plant Science Concentration

Introductory Biology and Chemistry Courses [16 credit hours]

- BIOL 104 Principles of Biology I (4)
- BIOL 106 Principles of Biology II (4)
- CHEM 163 General Chemistry I (3)
- CHEM 165 General Chemistry I Lab (1)
- CHEM 164 General Chemistry II (3)
- CHEM 166 General Chemistry II Lab (1)

Participation in Departmental Mentoring and Assessment:

- Participation in BIOL 195 and BIOL 295, and meeting with your mentor when in residence is expected.
- Students who are not able to take 195 and 295 (i.e. transfer students) may take BIOL 395 to fulfill this requirement.
- All students are also expected to participate in senior exit surveys.

Other science courses (completion of **four** of the following six options) [16 credit hours]

- CHEM 342 and 344 Principles of Organic Chemistry I with lab (3/1)
- CHEM 343 and 345 Principles of Organic Chemistry II with lab (3/1)
- PHYS 131 and 132 Physics I with lab (3/1)
- PHYS 133 and 134 Physics II with lab (3/1)
- EAS 101 and 102 Earth Systems I with lab (3/1)
- EAS 103 and 104 Earth's Dynamic Environment II with lab (3/1)

Mathematics Courses [7-8 credit hours]

- MATH 142 Calculus I (4)
- MATH 130 Elementary Statistics with Computers [3] or BIOL 479 Biometry [4]

Upper Division Biology Requirements [35 credit hours]

- BIOL 301 Evolutionary Biology (3)
- BIOL 302 Molecular Cellular Biology I (Biochemistry & Molecular Biology) (3)
- BIOL 303 Principles of Genetics (3)
- BIOL 304 Molecular Cell Biology II (Cell Structure & Function) (3)
- BIOL 326 Biology of Plants and Fungi [4]
- BIOL 349 Plant Physiology [3]
- BIOL 409 Plant Ecology [3]

- One CMDB elective course with a lab in the area of Cellular, Molecular, and Developmental Biology (CMDB)
- An additional laboratory course, which may be chosen from the CMDB group, the EEOB group, or BIOL 479

- Senior Inquiry [BIOL 480, 481, 482, 489, 497, or 498, or a graduate-level (500-level or above) biology course] *Note: The Plant Science Internship (BIOL 482) is recommended.

- BIOL elective courses [minimum of 35 hours of 300/400 level BIOL coursework, including the required courses listed here]

Sample Four-Year Plan
B.S. in Biology: Plant Science

Fall of First Year		**Spring of First Year**
BIOL 104 Principles of Biology I [4]		BIOL 106 Principles of Biology II [4]
CHEM 163/165 General Chem. I with lab [3/1]		BIOL 195 First-Year Mentoring
		CHEM 164/166 General Chem. II with lab [3/1]
		MATH 142 Calculus I [4]
Fall of Sophomore Year		**Spring of Sophomore Year**
BIOL 295 Second-Year Mentoring		BIOL 304 MCB II (Cell Structure & Function) [3]
BIOL 302 MCB I (Biochem. & Mol. Biol.) [3]		CHEM/PHYS/EAS option [4]
CHEM /PHYS/EAS option [4]		
Statistics (MATH 130 or BIOL 479) [3-4]		
Fall of Junior Year		**Spring of Junior Year**
BIOL 303 Principles of Genetics [3]		BIOL 349 Plant Physiology [3]
BIOL 326 Biology of Plants & Fungi [4]		BIOL CMDB Elective with lab [4]
CHEM/PHYS/EAS option [4]		BIOL 482 Plant Science Internship [variable]
		CHEM/PHYS/EAS option [4]
Fall of Senior Year		**Spring of Senior Year**
BIOL 409 Plant Ecology (3)		BIOL 301 Evolutionary Biology [3]
BIOL Elective with lab [4]		BIOL Elective [3]
		BIOL Elective (if credit hours are still needed)

BIOL electives must be at the 300-level or above. BIOL electives must include one CMBD elective, one EEOB elective, three laboratory courses (at least one from the CMDB group and at least one from the EEBO group), and a plant course.

For the Bachelor of Science, a total of up to 4 credit hours of Independent Research (BIOL 496), Library Project (BIOL 497), and Advanced Independent Research (BIOL 498) may be counted toward the 35 required upper-division credits. These courses do not count as structured lab courses.

Senior Inquiry options: Internship in Conservation (BIOL 480), Integrated Bioinformatics Internship (BIOL 481), Internship in Plant Science (BIOL 482), Comprehensive Examination (BIOL 489), Library Project (BIOL 497), Advanced Independent Research (BIOL 498), graduate-level biology course (500-level or above)