

PLANT MOLECULAR AND CELLULAR BIOLOGY MINOR

The Horticultural Sciences Department facilitates this interdisciplinary minor, a cooperative effort of the departments of Agronomy, Environmental Horticulture, Horticultural Sciences, Plant Pathology and Microbiology and Cell Science. It is particularly appropriate for students majoring in horticultural science, microbiology and cell science, and plant science, although it is available to students in other majors.

About this Program

- **College:** Agricultural and Life Sciences
- **Credits:** 17-20, completed with minimum grades of C
- **Contact:** Email; 352.273.4789

The minor offers academic training and hands-on experience in current laboratory techniques and helps students prepare for graduate school or lab positions in plant biotechnology.

Prerequisites

Code	Title	Credits
Select one:		4
BOT 2011C	Plant Diversity	
BSC 2011 & 2011L	Integrated Principles of Biology 2 and Integrated Principles of Biology Laboratory 2	
CHM 2210	Organic Chemistry 1	3
CHM 2211	Organic Chemistry 2	3

Required Courses

Code	Title	Credits
HOS 3305	Introduction to Plant Molecular Biology	3
HOS 4313C	Laboratory Methods in Plant Molecular Biology	2
	Approved biochemistry elective	4
	Approved genetics elective	3
	Approved physiology elective	3
	Approved elective	2-5
Total Credits		17-20

Approved Electives

Biochemistry Electives

Code	Title	Credits
BCH 3025	Fundamentals of Biochemistry	4
BCH 4024	Introduction to Biochemistry and Molecular Biology	4
CHM 3217	Organic Chemistry/Biochemistry 1	4

Genetics Electives

Code	Title	Credits
AGR 3303	Genetics	3
MCB 4304	Genetics of Microorganisms	3
PCB 3063	Genetics	4
PCB 4522	Molecular Genetics	3

Physiology Electives

Code	Title	Credits
BOT 3503	Physiology and Molecular Biology of Plants	3
HOS 4304	Horticultural Physiology	3

Electives

Code	Title	Credits
MCB 3020	Basic Biology of Microorganisms	3
MCB 5305L	Microbial Genetics Lab	2
PLS 4242C	Micropropagation of Horticultural Crops	4
XXX 4905	Individual Studies in PMCB ¹	3-5

¹ Individual studies courses are registered by the department prefix appropriate to the student's major.