Subplan: Plant Sciences

Aim:

To prepare students for careers in plant or microbial biology at the molecular, cellular, organismal, and population levels.

Learning objectives:

In addition to achieving the learning objectives of the major, graduates of this subplan will be able to...

XXXXXXXXXXX

Required general coursework

Students must meet all University of Arizona and UA College of Agriculture and Life Sciences requirements for graduation. These include:

- Composition requirements
- Second language requirements
- General education requirements (Natural Sciences requirements are satisfied by major coursework)
- Overall required units, upper division units, and 4-year institution units

Required and elective major coursework

Course number	Course name	Units
Mathematics requirem	nents and supporting coursework (35-38 credits)	
	te one of the following:	
MATH 113	Elements of Calculus	3
MATH 122A+122B	Functions for Calculus + First-Semester Calculus	5
MATH 125	Calculus I	3
Science Communicati	on: Complete one of the following:	
ENVS 408	Scientific Writing	3
ENVS 415	Translating Environmental Science	3
ENGL 308	Technical Writing	3 3 3 3
COMM 312	Applied Organizational Communication	3
ENGL 307	Business Writing	3
AGED 422	Communicating Knowledge in Ag & Life Science	3
Complete all of the fol	llowing:	
PHYS 102+181	Introductory Physics I, lecture + lab	4
CHEM 141+143 or	General Chemistry I, lecture + lab	4
151		
CHEM 142+144 or 152	General Chemistry II, lecture + lab	4
CHEM 241A+243A	Organic Chemistry I, lecture + lab	4
BIOC 384	Foundations in Biochemistry	3
MCB 181R+L	Introductory Biology I, lecture + lab	4
ECOL 182R	Introductory Biology II, lecture	3
AREC 239 <i>or</i> BIOS 376	Introduction to Statistics and Data Analysis <i>or</i> Introduction to Biostatistics	4 or 3
Core courses for majo		
PLS 195A	Colloquium - How Will We Feed and Clothe 9-billion People in 2050?	1

PLS 240Plant Biology4PLS 315Introductory Plant Pathology3PLS 312Animal and Plant Genetics4PLS 359Plant Cell Structure and Function3PLS 360Plant Growth and Physiology Lab1PLS 498Senior Capstone2 <i>Required courses for subplan (15 credits)</i> ECOL 335Evolutionary Biology3PLS 4440Mechanisms in Plant Development3PLS 4440Plant Biochemistry and Metabolic Engineering3PLS 4440Plant Mechanisms in Plant Development3Approved electives for subplan (enough to bring total to 28 for subplan).PLS 449APlant Molecular Biology3Approved electives for subplan (enough to bring total to 28 for subplan).PLS 307Evolution of Food Plants3PLS 333General Virology3PLS 340Introduction to Biotechnology3PLS 444RPlant Biotechnology Laboratory2PLS 3430Introduction to Biotechnology3PLS 442RPlant Biotechnology Laboratory <tr< th=""><th>Plant Sciences</th><th>Plant Sciences (generic) subplan</th><th>Draft</th></tr<>	Plant Sciences	Plant Sciences (generic) subplan	Draft		
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