Department of Agricultural Science and Plant Protection

Interim Department Head: Dr. Fred Musser
Interim Academic Coordinator: Dr. Cory Bailey

The Department of Agricultural Science and Plant Protection offers a Bachelor of Science degree in Agricultural Science and minors in Entomology and Plant Pathology. These programs prepare individuals for a variety of agricultural related careers. Many agricultural businesses and organizations are seeking graduates who have a diversified knowledge of agriculture and life sciences, which includes production agriculture, business, leadership and management. Many graduates of these programs become involved in agriculture business and industry, production agriculture operations, international agriculture development, or pursue advanced study in areas such as agronomy, entomology, and plant pathology.

BS in Agricultural Science (AGS)

The Agricultural Science degree prepares individuals for a variety of agricultural related careers. Many agricultural businesses and organizations are seeking graduates who have a diversified knowledge of agriculture and life sciences, which includes production agriculture, business, leadership and management. Many graduates become involved in agriculture business and industry, production agriculture operations, international agriculture development or pursue advanced study in areas such as nutrition and agricultural education.

Agricultural Science allows students to develop a high concentration of science and specialized agricultural study. Through the Agricultural Science degree program, a student can pursue a bachelor of science in agriculture and develop specialization areas that will serve his/her individual needs and interests. For the degree requirements, students must complete 124 hours, which includes 18 hours of science and 58 hours of agricultural science. Thirty hours will be agricultural science electives, which must be taken from two different agriculture focus areas within the College of Agriculture and Life Sciences. (See advisor for suggested focus areas.) The student should select agricultural focus areas that are closely related and complement each other and are related to the career objectives of the student. At least 12 hours in each agricultural focus area must be 3000-4000 level courses. The student will also have 14 hours of agriculture and science electives to complete which should also complement the selected agricultural focus areas. At least three hours must be a natural life science.

Graduates will have knowledge of

1. the diversified field of agriculture;
2. basic agricultural sciences;
3. leadership principles;
4. the basic principles of production; and
5. the application of basic science principles to production agriculture and agricultural business management.

Graduates will be able to

1. plan and conduct basic agricultural research;
2. manage an agricultural enterprise (business or production);
3. provide leadership in a variety of employment settings; and
4. communicate effectively orally and in writing to various audiences.

In various courses, students produce and present reports that demonstrate the performance learning objectives. In addition to faculty assessment, external assessors from other departments and from typical clientele audiences observe presentations and provide feedback.

Internship supervisors and co-curricular sponsors, along with student participants, provide feedback about the internship using a form based on the learning objectives.

Degree Requirements

English Composition		
EN 1103	English Composition I	3
or EN 1104	Expanded English Composition I	
EN 1113	English Composition II	3
or EN 1173	Accelerated Composition II	
Mathematics		
Select from General Education courses		3

Science		
BIO 1134	Biology I	4
BIO 1144	Biology II	4
CH 1043	Survey of Chemistry I	3
or CH 1213	Chemistry I	
Humanities		
Select from General Education courses		6
Fine Arts		
Select from General Education courses		3
Social Science		
AEC 2713	Introduction to Food and Resource Economics	3
or EC 2113	Principles of Macroeconomics	
or EC 2123	Principles of Microeconomics	
Select from General Education courses		3
Major Core		
ABE 1863	Engineering Technology in Agriculture	3
ADS 1113 & ADS 1121	Animal Science and Animal Science Laboratory	4
AEC 3133	Introductory Agribusiness Management	3
AELC 3500		
CH 1051	Experimental Chemistry	1
CH 1053	Survey of Chemistry II	3
or CH 1223	Chemistry II	
EPP 2213	Introduction to Insects	3
or EPP 4113	Principles of Plant Pathology	
PSS 1313	Plant Science	3
or BIO 2113	Plant Biology	
PSS 3301	Soils Laboratory	1
PSS 3303	Soils	3
15 hours from each of two agriculture focus areas [1]		30
Agriculture/science electives [1,2]		14
Free electives		9
Oral Communication Requirement		
AELC 3333	Professional Presentations in Agriculture and Life Sciences	3
Writing Requirement		
AELC 3203	Professional Writing in Agriculture, Natural Resources, and Human Sciences	3
Computer Literacy		
AELC 4203	Applications of Computer Tech to Agricultural Education, Leadership, and Communications	3
Total Hours		**124**

1 See advisor for approved courses
2 3 hours must be a natural/life science

Entomology Minor

The Entomology minor is offered to help students in other programs develop specific disciplinary skills to prepare them for entry into the science-related workforce. Agriculture, forestry, and service sector industries recruit and employ a diversity of personnel variously trained in the biological sciences, business, chemistry, human health, law, natural resource management, and veterinary medicine for whom expertise in entomology would be considered an asset. The minor in Entomology provides these individuals with enhanced employment opportunities in these industries.

Students seeking an Entomology minor are required to complete at least 18 credit hours as specified to receive a minor in Entomology. Additionally, students in the IPM concentration of the Agronomy major must complete EPP 4164 Insect Taxonomy as a requirement for receiving a minor in Entomology.

EPP 2213	Introduction to Insects	3-4
or EPP 4154	General Entomology	
EPP 4263	Principles of Insect Pest Management	3
EPP 4000	Directed Individual Study in Entomology and Plant Pathology	3-5
Choose 6-9 hours from the following:		6-9
EPP 3124	Forest Pest Management	
EPP 3423	Ornamental and Turfgrass Insects	
EPP 4164	Insect Taxonomy (required for AGR-IPM majors)	
EPP 4173	Medical and Veterinary Entomology	
EPP 4234	Field Crop Insects	
EPP 4244	Aquatic Entomology	
EPP 4335		
EPP 4543	Toxicology and Insecticide Chemistry	
EPP 4613	Forensic Entomolgy	
Total Hours		**18**

Plant Pathology Minor

The Plant Pathology minor is offered to help students in other programs develop specific disciplinary skills to prepare them for entry into the science-related workforce. Agriculture, forestry, and service sector industries recruit and employ a diversity of personnel variously trained in the biological sciences, business, chemistry, human health, law, natural resource management, and veterinary medicine for whom expertise in plant pathology would be considered an asset. The minor in Plant Pathology provides these individuals with enhanced employment opportunities in these industries.

Students seeking a Plant Pathology minor are required to complete at least 18 credit hours as specified to receive a minor in Plant Pathology. Additionally, students in the IPM concentration of the Agronomy major must complete EPP 4254 Introduction to Mycology as a requirement for receiving a minor in Plant Pathology.

EPP 4000	Directed Individual Study in Entomology and Plant Pathology	3-5
EPP 4113	Principles of Plant Pathology	3
EPP 4163	Plant Disease Management	3
Choose 7-9 hours from the following:		7-9
EPP 3124	Forest Pest Management	
EPP 4152	Advanced Fungal Taxonomy-Fungi Imperfecti	
EPP 4214	Diseases of Crops	
EPP 4254	Introduction to Mycology (required for AGR-IPM majors)	
EPP 4264	Advanced Mycology	
EPP 4523	Turfgrass Diseases	
Total Hours		**18**