

# POULTRY AND AVIAN SCIENCE, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

## Program Description

The Poultry and Avian Science minor is designed for students who wish to supplement their academic major with studies focused on the biology and management of avian species, with an emphasis on domestic fowl. In recognition of the diverse career opportunities in the modern poultry and game bird industries, the minor is designed to also accommodate students with primary interests in agribusiness management, food science, and wildlife science. Students are required to complete a minimum of 18 credits (9 credits at the 400 level). ANSC 211, ANSC 311, and ANSC 425/VBSC 425 provide a foundation of knowledge pertaining to both avian sciences and the commercial poultry industry, while additional courses selected by the student will allow for further specialization in the foundation animal science disciplines, agribusiness management, food science, and wildlife and fisheries science. In addition, credits from poultry or avian internship experiences and/or independent study projects may also be applied towards meeting the requirements of the minor.

The University's Poultry Education and Research Center is used extensively for supplementing classroom work with hands-on laboratories. The flexibility of the minor permits program planning commensurate with an individual's interests and professional goals, and should enhance the student's ability to compete for related positions in industry, government, or academia (graduate or professional school).

## What is Poultry and Avian Science?

Poultry and Avian Science encompasses avian biology, management, and health. Domestic fowl, or poultry, are birds that are kept primarily for meat and eggs. The history of domestication of chickens and ducks dates back thousands of years to the Chinese, Egyptians, Greeks, and Romans, while turkeys served as food for Indians in North America as early as 1000 A.D. Chicken has become the world's preferred meat, and this has occurred because of tremendous scientific advances in breeding (genetics), physiology, nutrition, and management (husbandry). Besides food, poultry can provide fiber (e.g., down and feathers). Today's modern poultry industry is science-based, technologically advanced, efficient, and environmentally conscious. Animal health and well-being are integral components of overall management strategies. In addition to poultry, opportunities to learn about other avian species through course work and research are possible.

## You Might Like This Program If...

- You are passionate about birds and want to learn about avian biology, management, and health.
- You like hands-on experiences in both caring for animals and/or conducting independent research projects.
- You want to undertake industry internships.
- You are interested in intercollegiate poultry judging.
- You seek a career in a dynamic growing industry that feeds the world.

- You want to pursue post-baccalaureate graduate (research) or professional degrees in avian biology or avian medicine.

## Program Requirements

Requirement	Credits
Requirements for the Minor	18

### Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10>). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

Code	Title	Credits
<b>Prescribed Courses</b>		
<i>Prescribed Courses: Require a grade of C or better</i>		
ANSC 211	Introduction to Avian Biology <sup>1</sup>	3
ANSC 311	Poultry Production and Management <sup>2</sup>	3
ANSC/VBSC 425	Principles of Avian Diseases <sup>3</sup>	3
<b>Additional Courses</b>		
<i>Additional Courses: Require a grade of C or better</i>		
Select 3 credits of the following:		3
AGBM 302	Food Product Marketing	
AGBM 338	Agribusiness in the Global Economy	
ANSC 207	Animal Products Technology	
ANSC 208	Animal Products Technology Laboratory	
ANSC 300	Anatomy and Physiology of Domestic Animals	
ANSC 301	Principles of Animal Nutrition	
ANSC 322	Animal Genetics and Selection	
ANSC 395	Animal Science Internship <sup>4</sup>	
WFS 300	The Vertebrates	
WFS 301	Vertebrate Laboratory	
Select 6 credits of the following:		6
AGBM 407	Farm Planning and Financial Management	
AGBM 408	Financial Decision Making for Agribusiness	
AGBM 420	Agribusiness Markets & Prices	
AGBM 460	Managing the Food System	
ANSC 418	Nutrient Management in Agricultural Systems	
ANSC 420	Animal Nutrition and Feed Technology	
ANSC 421	Poultry Evaluation and Selection	
ANSC 423	Comparative Physiology of Domestic Animals	
ANSC 496	Independent Studies <sup>4</sup>	
ANSC 499	Foreign Studies	
FDSC 408	Food Microbiology	
FDSC 409	Laboratory in Food Microbiology	
FDSC 411	Managing Food Quality	
FDSC 415	Science and Technology of Muscle Foods	
VBSC 420	General Animal Pathology	
WFS 406	Ornithology Laboratory	
WFS 407	Ornithology	
WFS 447W	Wildlife Management	

<sup>1</sup> BIOL 110 is a prerequisite for ANSC 211.

<sup>2</sup> ANSC 100 is a prerequisite for ANSC 311.

<sup>3</sup> ANSC 211, ANSC 311 and MICRB 106 & MICRB 107 or MICRB 201 & MICRB 202 are prerequisites for ANSC 425/VBSC 425.

<sup>4</sup> ANSC 395 and ANSC 496 must have a poultry or avian biology emphasis.

## Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/>)

## University Park

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## Career Paths

### Careers

Graduates enjoy careers in animal agribusiness management, animal breeding and genetics, animal health/pharmaceuticals/veterinary science, animal nutrition/feed additives, animal well-being (auditor), environmental management, extension education, feed mill operation, food safety/quality control, government (regulatory agencies), hatchery management, live production management of laying hens, broilers, turkeys, ducks, etc., operations management (poultry processing), research/laboratory management, and sales and marketing.

MORE INFORMATION ABOUT POTENTIAL CAREER OPTIONS FOR GRADUATES WITH A MINOR IN POULTRY AND AVIAN SCIENCE (<https://animalscience.psu.edu/undergraduate/resources/careers/>)

## Opportunities for Graduate Studies

The graduate program in Animal Science offers research and teaching activities at the University Park Campus. Master of Professional Studies (M.P.S.), Master of Science (M.S.), and Doctor of Philosophy (Ph.D.) degrees are available. Our faculty specialize in management, breeding and genomics, growth and development biology, meat science, nutrition, and nutritional, lactational, and reproductive physiology of a wide variety of animals. Course work and the area of thesis research will be designed to meet the specific interests and needs of the student. Students with a Poultry and Avian Science minor have also pursued degrees in veterinary medicine (D.V.M. or V.M.D.), sometimes concurrently with a Ph.D. program.

MORE INFORMATION ABOUT OPPORTUNITIES FOR GRADUATE STUDIES (<https://animalscience.psu.edu/graduate/>)

LEARN MORE ABOUT THE ASSOCIATION OF AMERICAN VETERINARY MEDICAL COLLEGES (<https://www.aavmc.org/about-aavmc/>)

## Contact

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