# Fundamentals of Entomology (Certificate)

The Certificate Program in Fundamentals of Entomology is a non-degree program offered through the Department of Entomology by distance education, by on-campus regular classroom course enrollment, or by a combination of the two. The program is designed to increase personal knowledge about insects, the most diverse group of animals on earth, and their importance to mankind and our environment. It will allow the student to appreciate the role of insect biology and diversity in relation to all forms of animal life. The Certificate Program is open to all NC State undergraduate majors and to students who are enrolled as Non-Degree Studies (NDS) students. Students who complete this Program should be better prepared to teach in the field of science education, work in many fields of animal and plant science including the agricultural sciences, and have a better appreciation of the world in which they live. The Program consists of 12 credit hours of entomology courses of which 3 are required and 9 are electives. Enrollment in 500 or higher numbered elective courses is limited to upper division undergraduates with consent of the instructor or to students who have already eamed an undergraduate degree.

### **Program Coordinator**

Dr. Clyde Sorenson

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# **Admissions Requirements**

Enrollment in NC State University in a baccalaureate degree program or as a Non-Degree Studies (NDS) student.

# Plan of Study

Contact the Program Coordinator.

# **Registration Information**

Contact the Program Coordinator.

#### **Academic Structure**

Term Effective: 8/2011

Plan Code: 11ENTCTU, 32ENTCTU

CIP Code: 26.0702

Description: Undergraduate Certificate in Fundamentals of Entomology Offered via on-campus and Distance Education (https://online-distance.ncsu.edu/program/university-undergratuate-certificate-infundamentals-of-entomology/) format

## Plan Requirements

The Program will require completion of 12 credit hours. ENT 425 General Entomology will be required of all students. The remaining nine hours can be taken from the list of additional entomology course electives. Students who have not yet earned at least 60 semester hours of college credit or equivalent must select elective courses from 200, 300 and

400 level courses. Upper division undergraduate students and students who have earned baccalaureate degrees may select from the complete list of electives with consent of individual instructors. A few elective courses have pre-requisites other than entomology courses and may not be suitable for all students. Students will select from these courses in consultation with the Department of Entomology's certificate coordinator.

Code	Title	Hours
Required Course		
ENT 425	General Entomology <sup>1</sup>	3
Elective Courses	3	
Select nine credit	s of the following:	9
ENT 201	Insects and People	
ENT 203	An Introduction to the Honey Bee and Beekeep	ing
ENT 207	Insects and Human Disease	
ENT 305	Introduction to Forensic Entomology	
ENT 401	Honey Bee Biology and Management <sup>1</sup>	
ENT/FOR 402	Forest Entomology <sup>1</sup>	
ENT 492	External Learning Experience	
ENT 493	Special Problems in Entomology	
ENT 502	Insect Diversity <sup>1</sup>	
ENT 503	Insect Morphology and Physiology <sup>1</sup>	
ENT 509	Ecology and Conservation of Freshwater Invertebrates <sup>1</sup>	
ENT 550	Fundamentals of Arthropod Management <sup>1</sup>	
ENT/ZO 582	Medical and Veterinary Entomology <sup>1</sup>	
Total Hours 12		

See course catalog for prerequisite information. (https://www.acs.ncsu.edu/php/coursecat/)

#### **Course Notes**

- All courses taken to satisfy the certificate requirements must be completed with a combined GPA of 2.0 or higher. Only courses completed with a grade of "C-" or better will be considered for the certificate.
- (DE) Courses with the (DE) notation are offered through classroom and asynchronous distanced education formats
- May take a maximum of 3 hours of either ENT 492 External Learning Experience or ENT 493 Special Problems in Entomology or in a combination of the two
- Sophomore standing requires 30 hours of college credit
- 500-level courses may be taken with consent of the instructor by students who have earned 60 credit hours or hold a baccalaureate degree

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