

# ENTOMOLOGY: INSECT BIOLOGY AND ECOLOGY, BSAG

**Requirements for Students Matriculating in or before Academic Year 2024-2025.** Learn more about University Academic Regulation 3.1 (<http://catalog.okstate.edu/university-academic-regulations/#matriculation>).

**Minimum Overall Grade Point Average: 2.00**

**Total Hours: 120**

Code	Title	Hours
<b>General Education Requirements</b>		
<i>English Composition</i>		
See Academic Regulation 3.5 ( <a href="http://catalog.okstate.edu/university-academic-regulations/#english-composition/">http://catalog.okstate.edu/university-academic-regulations/#english-composition/</a> )		
ENGL 1113	Composition I	3
or ENGL 1313	Critical Analysis and Writing I	
Select one of the following:		3
ENGL 1213	Composition II	
ENGL 1413	Critical Analysis and Writing II	
ENGL 3323	Technical Writing	
<i>American History &amp; Government</i>		
Select one of the following:		3
HIST 1103	Survey of American History	
HIST 1483	American History to 1865 (H)	
HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
<i>Analytical &amp; Quantitative Thought (A)</i>		
Select one of the following:		3
MATH 1483	Mathematical Functions and Their Uses (A)	
MATH 1513	College Algebra (A) <sup>1</sup>	
MATH 1613	Trigonometry (A) <sup>1</sup>	
MATH 2103	Business Calculus (A) <sup>1</sup>	
<i>Humanities (H)</i>		
Courses designated (H)		6
<i>Natural Sciences (N)</i>		
Must include one Laboratory Science (L) course		
CHEM 1314	Chemistry I (LN) <sup>1</sup>	4
or CHEM 1215	Chemical Principles I (LN)	
Select four hours from the following:		4
BIOL 1113	Introductory Biology (N)	
& BIOL 1111	and Introductory Biology Laboratory (LN) <sup>1</sup>	
BIOL 1114	Introductory Biology (LN) <sup>1</sup>	
<i>Social &amp; Behavioral Sciences (S)</i>		
Course designated (S)		3
<i>Additional General Education</i>		
Courses designated (A), (H), (N), or (S)		8
<b>Hours Subtotal</b>		<b>40</b>
<b>Diversity (D) &amp; International Dimension (I)</b>		
May be completed in any part of the degree plan		
Select at least one Diversity (D) course		
Select at least one International Dimension (I) course		

## College/Departmental Requirements

### Agricultural Sciences and Natural Resources

Ferguson College of Agriculture course cannot be used here and as an (N)

UNIV 1111	First Year Seminar (or other approved first year seminar course)	1
AGEC 1113	Introduction to Agricultural Economics (S)	3
ENTO 2993	Introduction to Entomology (LN)	3
STAT 2013	Elementary Statistics (A)	3
Select one of the following:		3
ANSI 1124	Introduction to the Animal Sciences	
BIOC 2344	Chemistry and Applications of Biomolecules	
ENVR 1113	Elements of Environmental Science (N)	
FDSC 1133	Fundamentals of Food Science	
HORT 1013	Principles of Horticultural Science (LN)	
LA 1013	Introduction to Landscape Architecture	
NREM 1014	Introduction to Natural History (LN)	
NREM 1113	Elements of Forestry	
NREM 2013	Ecology of Natural Resources	
PLNT 1213	Introduction to Plant and Soil Systems (N)	
SOIL 2124	Fundamentals of Soil Science (N)	

### Written and Oral Communications

Select one of the following:		3
AGCM 3103	Written Communications in Agricultural Sciences and Natural Resources	
BCOM 3113	Written Communication	
BCOM 3443	Business Communication for International Students	
ENGL 3323	Technical Writing <sup>2</sup>	
Select one of the following: <sup>3</sup>		3
AGCM 3203	Oral Communications in Agricultural Sciences & Natural Resources (S)	
SPCH 2713	Introduction to Speech Communication (S)	
SPCH 3733	Elements of Persuasion (S)	

**Hours Subtotal 19**

## Major Requirements

With approval from the advisor and the department head, a maximum of 30 hours of science courses from an accredited doctoral health program may be substituted for major requirements other than the ENTO core courses .

### Core Courses

ENTO 3044	Insect Morphology and Physiology	4
ENTO 4464	Insect Biology and Classification	4
ENTO 2001	Introduction to Entomological Research	1
ENTO 3001	Research Skills in Entomology	1
ENTO 4800	Entomology Practicum	1
Entomology or plant pathology course not taken as a core course		12

### Related Courses

Genetics:		
Select one of the following:		3
BIOL 3023	General Genetics	
PLNT 3554	Plant Genetics and Biotechnology	
ANSI 3423	Animal Genetics	

Ecology:		
Select one of the following:		3
BIOL 3034	General Ecology	
NREM 4033	Ecology Of Invasive Species	
Chemistry:		
CHEM 1225	Chemical Principles II (LN) <sup>1</sup>	5
or CHEM 1515	Chemistry II (LN)	
Select one of the following:		3
BIOC 3653	Survey of Biochemistry	
CHEM 3053	Organic Chemistry I	
Select 24 hours of the following:		24
ENPP 2143	Global Agricultural Biosecurity and Forensics	
ENTO 2003	Insects and Society (N)	
ENTO 2223	Insects in Global Public Health (N)	
ENTO 3003	Livestock Entomology	
ENTO 3501	Entomology for Educators	
ENPP 3663	Turfgrass Integrated Pest Management	
ENTO 4223	Ecological Methodology	
ENTO 4400	Special Topics	
ENTO 4484	Aquatic Entomology	
ENTO 4573	Introduction to Forensic Entomology	
ENTO 4733	Insect Behavior and Chemical Ecology	
ENTO 4854	Medical and Veterinary Entomology	
Foreign Language: Up to 10 credit hours of upper division foreign language may be substituted		
<b>Hours Subtotal</b>		<b>61</b>
<b>Electives</b>		
Select 0 hours or hours to complete required total for degree		0
<b>Total Hours</b>		<b>120</b>

1

College & Departmental requirements that may be used to meet General Education requirements.

2

If ENGL 3323 Technical Writing is substituted for ENGL 1213 Composition II above; hours in this block are reduced by 3.

3

If used as (S) course above, hours in this block reduced by 3.

## Other Requirements

- A minimum of 40 semester credit hours and 100 grade points must be earned in courses numbered 3000 or above.
- A 2.00 GPA or higher in upper-division hours.

## Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as

these changes do not result in semester credit hours being added or do not delay graduation.

- Degrees that follow this plan must be completed by the end of Summer 2030.