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
General Education Requirements		
English Composition		
See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/#english-composition/)		
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	
American History & Government		
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
Analytical & Quantitative Thought (A)		
Select one of the following:		3
MATH 1483	Mathematical Functions and Their Uses (A)	
MATH 1513	College Algebra (A) [1]	
MATH 1613	Trigonometry (A) [1]	
MATH 2103	Business Calculus (A) [1]	
Humanities (H)		
Courses designated (H)		6
Natural Sciences (N)		
Must include one Laboratory Science (L) course		
CHEM 1314	Chemistry I (LN) [1]	4
or CHEM 1215	Chemical Principles I (LN)	
Select four hours from the following:		4
BIOL 1113 & BIOL 1111	Introductory Biology (N) and Introductory Biology Laboratory (LN) [1]	
BIOL 1114	Introductory Biology (LN) [1]	
Social & Behavioral Sciences (S)		
Course designated (S)		3
Additional General Education		
Courses designated (A), (H), (N), or (S)		8
Hours Subtotal		**40**
Diversity (D) & International Dimension (I)		
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)		
AG 1011	First Year Seminar	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	
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 [2]	
Select one of the following: [3]		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 of eight hours.		
Core Courses		
Select 8 hours of the following:		8
ENTO 3044	Insect Morphology and Physiology	
ENTO 4464	Insect Biology and Classification	
Additional Entomology		
ENTO 4800	Entomology Practicum	3
Any 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) [1]	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
BIOC 2344	Chemistry and Applications of Biomolecules	
BIOC 3653	Survey of Biochemistry	
BIOL 1604	Animal Biology	
ENTO 2003	Insects and Society (N)	
ENTO 2223	Insects in Global Public Health (N)	
ENTO 3003	Livestock Entomology	
ENTO 3021	Postharvest, Structural, and Urban Arthropod Pests	
ENTO 3331	Insect Pests of Agronomic Crops	
ENTO 3421	Horticultural Insects	
ENTO 3461	Insects in Forest Ecosystems	
ENTO 3501	Entomology for Educators	
ENTO 3663	Turfgrass Integrated Pest Management	
ENTO 4223	Ecological Methodology	
ENTO 4400	Special Topics	
ENTO 4484	Aquatic Entomology	
ENTO 4733	Insect Behavior and Chemical Ecology	
ENTO 4854	Medical and Veterinary Entomology	
ENTO 4923	Applications of Biotechnology in Pest Management	
HORT 3153	Turf Management	
HORT 3084	Plant Propagation	
NREM 2013	Ecology of Natural Resources	
NREM 3063	Natural Resource Biometrics	
NREM 3101	Forest Resource Field Studies	
NREM 3613	Principles of Rangeland Management	
PBIO 1404	Plant Biology (LN)	
PBIO 4463	Plant Physiology	
PLNT 2013	Applied Plant Science	
PLNT 3554	Plant Genetics and Biotechnology	
PLNT 4113	Advanced Weed Science	
PLNT 4123	Plant-Environment Interactions	
PLNT 4353	Plant Breeding	
PLP 3343	Principles of Plant Pathology	
MICR 2123 & MICR 2132	Introduction to Microbiology and Introduction to Microbiology Laboratory	
SOIL 4213	Precision Agriculture	
SOIL 4363	Environmental Soil Science	
SOIL 4893	Environmental Soil Chemistry	
BIOL 1604	Animal Biology	
BIOL 3104	Invertebrate Zoology	
BIOL 4104	General Parasitology	
BIOL 4133	Evolution	
MATH 2103	Business Calculus (A)	
MATH 2144	Calculus I (A)	
MATH 2153	Calculus II (A)	
CHEM 3153 & CHEM 3112	Organic Chemistry II and Organic Chemistry Laboratory	
PHYS 1114	College Physics I (LN)	
PHYS 1214	College Physics II (LN)	
STAT 2331	SAS Programming	
STAT 4013	Statistical Methods I (A)	
STAT 4023	Statistical Methods II	
STAT 4043	Applied Regression Analysis	
BIOL 4133	Evolution	
Foreign Language: Up to 10 credit hours of upper division foreign language may be substituted		
Hours Subtotal		**61**
Electives		
Select 0 hours or hours to complete required total for degree		0
Total Hours		**120**

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.