

From: [Smith, Randy](#)
To: [Klinger, Ellen](#); [Osborne, Jeanne](#)
Cc: [Leite, Fabio](#); [Reed, Katie](#); [Smith, Randy](#); [Orr, James](#); [Duffy, Lisa](#); [Strange, Jamie](#); [Christy, Ann](#)
Subject: Proposal to revise the Entomology major
Date: Thursday, September 7, 2023 12:27:47 PM
Attachments: [image001.png](#)

Ellen and Jeanne:

The proposal from the Department of Entomology to revise the Entomology major leading to the Bachelor of Science in Agriculture degree was approved by the Council on Academic Affairs at its meeting on September 6, 2023. Thank you for attending the meeting to respond to questions/comments.

No additional level of internal approval is necessary. This action will be included in the Council's next Annual Activities Report to the University Senate (July 2024).

The Office of the University Registrar will work you with any implementation issues.

Please keep a copy of this message for your file on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions please contact the Chair of the Council, Professor Fábio Leite.(11), or me.

Randy



THE OHIO STATE UNIVERSITY

W. Randy Smith, Ph.D.

Vice Provost for Academic Programs

Office of Academic Affairs

University Square South, 15 E. 15th Avenue, Columbus, OH 43201

614-292-5881 Office

smith.70@osu.edu

Assisted by:

Katie Reed

Executive Assistant

(614) 292-5672

reed.901@osu.edu

From: [Osborne, Jeanne](#)
To: [Smith, Randy](#)
Cc: [Reed, Katie](#); [Violet, Cynthia A.](#); [Meadows, Kendyl](#); [Barker, David](#); [Klinger, Ellen](#)
Subject: Requesting CAA Approval for revision to the Entomology - BS AGR major
Date: Friday, June 16, 2023 11:18:10 AM
Attachments: [image001.png](#)
[ENTMLGY BS Program Change May 2023.pdf](#)

Dear Dr. Smith,

The College of Food, Agricultural, and Environmental Sciences is requesting Council on Academic Affairs approval for a revision to the Entomology Major in the Department of Entomology, as summarized below and outlined in the attached proposal.

The primary component of the proposal is to update the major electives to reflect changes in course offerings in the Department. With this proposal, a course that is no longer being offered (ENTMLGY 5001) is removed from the elective list, and additional options are provided to students. The overall impact is to provide students with options in their interest areas and that are consistently offered.

This proposal has been approved by the Academic Affairs Committee of the Department of Entomology, and by the CFAES Committee on Academic Affairs. Please let me know if any additional information is needed in support of this request.

Sincerely,

Jeanne



Jeanne M. Osborne | *Pronouns: She, Her, Hers*

Assistant Dean for Academic Affairs
College of Food, Agricultural, and Environmental Sciences
100E Agricultural Administration, 2120 Fyffe Rd.
Columbus, OH 43210
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Fax: 614-292-1218
e-mail: Osborne.2@osu.edu

'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change' (Bob Kerrey)



DATE: May 9, 2023
TO: Jeanne Osborne, Assistant Dean Academic Affairs
FROM: Ellen Klinger, Assistant Professor Professional Practice
RE: Modifications of ENTMLGY BS major

The Entomology department is requesting modification of the program descriptions for our undergraduate major. The changes are the removal of a no longer offered elective and the addition of new classes as electives in these degree plans. These alterations will increase the number available electives in our major and reflect the current curriculum. We do not anticipate the removal of classes to be an issue for any current students, as ENTMLGY 5001 has not been offered for a minimum of 6 years.

Summary of the changes:

B.S. Agriculture, Entomology Major: Remove ENTMLGY 5001 as an elective, add ENTMLGY 3100, Insect Symbioses (3cr.), and ENTMLGY 5121, Insect Pathology (3cr) to the elective list.

After departmental committee approvals, the faculty voted to approve the changes on February 27th, 2023.

Please let me know if there are additional questions or clarifications needed.

Thank you,

Ellen Klinger, Associate Professor Entomology

Bachelor of Science in Agriculture
Major: Entomology

CURRENT

The entomology major couples a strong background in the biological sciences with in-depth study of insect biology and applied entomology. Students learn insect physiology, behavior, ecology and taxonomy, as well as beekeeping, veterinary and public health entomology, sustainable agriculture, and integrated pest management in agricultural, forest and urban environments. Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	Course Options	Hours
GE Seminar	ACADAFF 1201	1
Writing and Information Literacy	<i>Student Choice</i>	3
Mathematical & Quantitative Reasoning/Data Analysis	MATH 1150 *	5
Literary, Visual and Performing Arts	<i>Student Choice</i>	3
Historical & Cultural Studies	<i>Student Choice</i>	3
Natural Science	BIOLOGY 1113 *	4
Social & Behavioral Sciences	AEDECON 2001 or ECON 2001.01 *	3
Race, Ethnic and Gender Diversity	<i>Student Choice</i>	3
Theme: Citizenship for a Diverse & Just World^a	<i>Student Choice</i>	4-6
Theme: Student Choice^a	<i>Student Choice</i>	4-6
GE Reflection	ACADAFF 4001	1
General Education Credit Hours:		34-38*

* Indicates a prerequisite and/or corequisite course to this major that can also fulfill a GE requirement. Students may select another GE course option in this category if they wish; however, the course is still required for this major.

B.S. in Agriculture Degree Requirements		
Requirement	Course Options	Hours
College & Department Survey	FAES 1100 (0.5) & ENTMLGY 1100 (0.5)	1
Oral Expression	AGRCOMM 3130 or COMM 2110	3
Additional Science	BIOLOGY 1114	4
Internship	ENTMLGY 4191	1-2
Minor Equiv. ^b	MATH 1151 Calculus I (5) -or- MATH 1156 Calculus for the Bio. Sci. (5) EEOB 3410 Ecology (4) MOLGEN 4500 General Genetics (3)	12
Credit Hours:		21-22

^a Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ✦ symbol.

^b Students in this program complete a group of courses called a minor equivalent.

Declaring an additional minor is not required.

^c A limit of 3 credit hours of 4998, 4999, and/or 4999H combined may be applied towards major hours.

^d This course is only offered at the Wooster campus.

Major Supporting Coursework		
Course	Title	Hours
CHEM 1210	General Chemistry I	5
CHEM 1220	General Chemistry II	5
Credit Hours:		10

Major Coursework		
Course	Title	Hours
ENTMLGY 4000	General Entomology	3
ENTMLGY 4001	General Entomology Laboratory	1
ENTMLGY 5604	Capstone: Problem-Based Studies in Plant Health	2

Select one applied entomology course:

ENTMLGY 4601	General Insect Pest Management	2
ENTMLGY 4607	Veterinary Entomology	2
ENTMLGY 5110	Ecology and Mgmt. of Pathogens and Insects Affecting Trees in Forest and Urban Environments	2
ENTMLGY 5605	Vector Biology and Vector-Borne Diseases	3
ENTMLGY 5608	Turfgrass Insect and Mite Pests – Identification, Biology, and Management	2
ENTMLGY 5609	Landscape Ornamental Plant Insect and Mite Pests – Identification, Biology, and Management	2

Select a minimum of 11 credit hours (9 credit hours at 3000+ level) of Entomology electives from applied entomology options above and/or the following:

ENTMLGY 2101	Insects and Human Affairs: Pests, Plagues, Poisons, and Politics	3
ENTMLGY 2200	Beekeeping	3
ENTMLGY 3330 or 4440H	Social Insects or Honors Social Insects	3
ENTMLGY 4998	Undergraduate Research in Entomology	1-3 ^c
ENTMLGY 4999 or 4999H	Research with Distinction or Honors Research with Distinction	1-3 ^c
ENTMLGY 5001 ^d	Entomological and Environmental Approaches to Fly Fishing	3
ENTMLGY 5150	Pollinator Biology and Conservation	2
ENTMLGY 5350.01	Taxonomy and Behavior of Aquatic Invertebrates	3
ENTMLGY 5490	Insect Behavior: Mechanisms and Function	3
ENTMLGY 5500	Biological Control of Arthropod Pests	3
ENTMLGY 5600	Principles and Applications of Integrated Pest Management	3
ENTMLGY 5800	Pesticide Science	3

Select an additional 16-17 crs of major electives (options list on next page)

Credit Hours:	36
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General Education	34-38
Degree Requirements & Minor Equiv.	21-22
Major Supporting Courses	10
Major	36
Open Electives	15-20
Minimum Total Credit Hours	121

Major Electives			
<i>Non-entomology elective course suggestions for students wishing to focus work in one of four tracks: Sustainable Insect Management (1), Insect Ecology and Conservation (2), Insects in Human and Veterinary Medicine (3) and Individualized Insect Studies (4)</i>			
Course	Title	Hours	Suggested track
AGRCOMM 3130	Oral Expression	3	1,3
BIOCHEM 4511*	Introduction to Biological Chemistry	4	1,3
CHEM 2310	Introductory Organic Chemistry	4	2,4
CHEM 2510	Organic Chemistry I	4	1,3
CHEM 2520	Organic Chemistry II	4	1,3
CHEM 2540	Organic Chemistry Lab I	2	1,3
CHEM 2550	Organic Chemistry Lab II	2	1,3
ECON 2001	Principles of Microeconomics	3	1,3
ENR 2367	Communicating Environmental and Natural Resources Information	3	1,2,3,4
ENR 3000	Soil Science	3	2,4
ENR 5279	Soil Fertility	3	2,4
HCS 2260	Data Analysis and Interpretation for Decision Making	3	1,2,3,4
HCS 5422**	Biology and Management of Weeds and Invasive Plants	3	2,4
MOLGEN 3436	Introductory Plant Physiology	3	1,3
MOLGEN 4700	Molecular Cell and Developmental Biology	3	1,3
PLNTPH 3001	General Plant Pathology Lecture	3	2,4
PLNTPH 3002	General Plant Pathology Lab	2	2,4
PLNTPH 4597	Contemporary Issues: Pesticides, Genetic Engineering, and the Environment	3	2,4

* Review prerequisites

** Prerequisite of HCS 2201/2204 & 2205, or HCS 2202

Policies and General Requirements for Degree

- A minimum of 121 total credit hours. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the 121-hour minimum requirement for the BS degree.
- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.
- A cumulative point-hour ratio of at least 2.00 on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ❖ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major supporting courses and major electives) may not be taken pass/non-pass.
- Coursework taken as open electives may include a maximum of 4 credit hours of physical activity courses (all 1139-1197 courses), and a maximum of 4 credit hours of campus music organizations.
- A college maximum of six hours of individual studies courses (x193) can be applied toward graduation; some majors may have a lower maximum.
- Students of CFAES must complete an internship of 1-2 hours as a requirement for degree. Any additional internship credit hours may count towards major hours (consult with your advisor). A college maximum of six hours of internship credit can be applied toward graduation; some majors may have a lower maximum.
- A maximum of three credits of 3488 can be applied toward graduation although some majors may have a lower maximum. A cumulative point-hour ratio of 2.0 is required to register for 3488 credit.
- Credit hours for 4999 ("with Research Distinction") and 4999H ("with Honors Research Distinction") are repeatable to maximum of six hours.
- **An application for degree must be submitted online at least two semesters prior to the intended graduation term. Application found at: <https://students.cfaes.ohio-state.edu/academics/undergraduate/graduation>**

Policies and General Requirements for Minors/Minor Equivalent

- The minor/minor equivalent must contain a minimum of 12 credit hours distinct from the major and/or additional minors (i.e., if a minor requires more than 12 credit hours, a student is permitted to overlap those hours beyond 12 with the major or with another minor).
- A 2.00 cumulative point-hour ratio is required in the minor/minor equivalent with a minimum C- grade for any course to be listed in the minor or minor equivalent (includes transfer credit).
- For programs requiring a minor: minors should be declared by the time students complete 60 hours.
- A student is permitted to count up to 6 credit-hours of transfer and/or EM credit in the minor or minor equivalent.
- Coursework graded Pass/Non-Pass cannot count in the minor. No more than 3 credit-hours of course work graded S/U may count toward the minor. Maximum of 3 credit-hours of xx93 are allowed to count in the minor.

Bachelor of Science in Agriculture
Major: Entomology

The entomology major couples a strong background in the biological sciences with in-depth study of insect biology and applied entomology. Students learn insect physiology, behavior, ecology and taxonomy, as well as beekeeping, veterinary and public health entomology, sustainable agriculture, and integrated pest management in agricultural, forest and urban environments. Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	Course Options	Hours
GE Seminar	ACADAFF 1201	1
Writing and Information Literacy	<i>Student Choice</i>	3
Mathematical & Quantitative Reasoning/Data Analysis	MATH 1150 *	5
Literary, Visual and Performing Arts	<i>Student Choice</i>	3
Historical & Cultural Studies	<i>Student Choice</i>	3
Natural Science	BIOLOGY 1113 *	4
Social & Behavioral Sciences	AEDECON 2001 or ECON 2001.01 *	3
Race, Ethnic and Gender Diversity	<i>Student Choice</i>	3
Theme: Citizenship for a Diverse & Just World ^a	<i>Student Choice</i>	4-6
Theme: Student Choice ^a	<i>Student Choice</i>	4-6
GE Reflection	ACADAFF 4001	1
General Education Credit Hours:		34-38*

* Indicates a prerequisite and/or corequisite course to this major that can also fulfill a GE requirement. Students may select another GE course option in this category if they wish; however, the course is still required for this major.

B.S. in Agriculture Degree Requirements		
Requirement	Course Options	Hours
College & Department Survey	FAES 1100 (0.5) & ENTMLGY 1100 (0.5)	1
Oral Expression	AGRCOMM 3130 or COMM 2110	3
Additional Science	BIOLOGY 1114	4
Internship	ENTMLGY 4191	1-2
Minor Equiv. ^b	MATH 1151 Calculus I (5) -or- MATH 1156 Calculus for the Bio. Sci. (5) EEOB 3410 Ecology (4) MOLGEN 4500 General Genetics (3)	12
Credit Hours:		21-22

^a Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ♣ symbol.

^b Students in this program complete a group of courses called a minor equivalent. Declaring an additional minor is not required.

^c A limit of 3 credit hours of 4998, 4999, and/or 4999H combined may be applied towards major hours.

^d This course is only offered at the Wooster campus.

Major Supporting Coursework		
Course	Title	Hours
CHEM 1210	General Chemistry I	5
CHEM 1220	General Chemistry II	5
Credit Hours:		10

Major Coursework		
Course	Title	Hours
ENTMLGY 4000	General Entomology	3
ENTMLGY 4001	General Entomology Laboratory	1
ENTMLGY 5604	Capstone: Problem-Based Studies in Plant Health	2

Select one applied entomology course:

ENTMLGY 4601	General Insect Pest Management	2
ENTMLGY 4607	Veterinary Entomology	2
ENTMLGY 5110	Ecology and Mgmt. of Pathogens and Insects Affecting Trees in Forest and Urban Environments	2
ENTMLGY 5605	Vector Biology and Vector-Borne Diseases	3
ENTMLGY 5608	Turfgrass Insect and Mite Pests – Identification, Biology, and Management	2
ENTMLGY 5609	Landscape Ornamental Plant Insect and Mite Pests – Identification, Biology, and Management	2

Select a minimum of 11 credit hours (9 credit hours at 3000+ level) of Entomology electives from applied entomology options above and/or the following:

ENTMLGY 2101	Insects and Human Affairs: Pests, Plagues, Poisons, and Politics	3
ENTMLGY 2200	Beekeeping	3
ENTMLGY 3100	Insect Symbioses	3
ENTMLGY 3330 or 4440H	Social Insects or Honors Social Insects	3
ENTMLGY 4998	Undergraduate Research in Entomology	1-3 ^c
ENTMLGY 4999 or 4999H	Research with Distinction or Honors Research with Distinction	1-3 ^c
ENTMLGY 5004 ^d	Entomological and Environmental Approaches to Fly Fishing	3
ENTMLGY 5121	Insect Pathology	
ENTMLGY 5150	Pollinator Biology and Conservation	2
ENTMLGY 5350.01	Taxonomy and Behavior of Aquatic Invertebrates	3
ENTMLGY 5490	Insect Behavior: Mechanisms and Function	3
ENTMLGY 5500	Biological Control of Arthropod Pests	3
ENTMLGY 5600	Principles and Applications of Integrated Pest Management	3
ENTMLGY 5800	Pesticide Science	3

Select an additional 16-17 crs of major electives (options list on next page)

Credit Hours:		36
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General Education	34-38
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Course	Title	Hours	Suggested track
AGRCOMM 3130	Oral Expression	3	1,3
BIOCHEM 4511*	Introduction to Biological Chemistry	4	1,3
CHEM 2310	Introductory Organic Chemistry	4	2,4
CHEM 2510	Organic Chemistry I	4	1,3
CHEM 2520	Organic Chemistry II	4	1,3
CHEM 2540	Organic Chemistry Lab I	2	1,3
CHEM 2550	Organic Chemistry Lab II	2	1,3
ECON 2001	Principles of Microeconomics	3	1,3
ENR 2367	Communicating Environmental and Natural Resources Information	3	1,2,3,4
ENR 3000	Soil Science	3	2,4
ENR 5279	Soil Fertility	3	2,4
HCS 2260	Data Analysis and Interpretation for Decision Making	3	1,2,3,4
HCS 5422**	Biology and Management of Weeds and Invasive Plants	3	2,4
MOLGEN 3436	Introductory Plant Physiology	3	1,3
MOLGEN 4700	Molecular Cell and Developmental Biology	3	1,3
PLNTPH 3001	General Plant Pathology Lecture	3	2,4
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Race, Ethnic and Gender Diversity	<i>Student Choice</i>	3
Theme: Citizenship for a Diverse & Just World ^a	<i>Student Choice</i>	4-6
Theme: Student Choice ^a	<i>Student Choice</i>	4-6
GE Reflection	ACADAFF 4001	1
General Education Credit Hours:		34-38*

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ENTMLGY 2200	Beekeeping	3
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ENTMLGY 4999 or 4999H	Research with Distinction or Honors Research with Distinction	1-3 ^c
ENTMLGY 5121	Insect Pathology	
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ENTMLGY 5490	Insect Behavior: Mechanisms and Function	3
ENTMLGY 5500	Biological Control of Arthropod Pests	3
ENTMLGY 5600	Principles and Applications of Integrated Pest Management	3
ENTMLGY 5800	Pesticide Science	3

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PLNTPH 3001	General Plant Pathology Lecture	3	2,4
PLNTPH 3002	General Plant Pathology Lab	2	2,4
PLNTPH 4597	Contemporary Issues: Pesticides, Genetic Engineering, and the Environment	3	2,4

* Review prerequisites

** Prerequisite of HCS 2201/2204 & 2205, or HCS 2202

Policies and General Requirements for Degree

- A minimum of 121 total credit hours. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the 121-hour minimum requirement for the BS degree.
- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.
- A cumulative point-hour ratio of at least 2.00 on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ❖ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major supporting courses and major electives) may not be taken pass/non-pass.
- Coursework taken as open electives may include a maximum of 4 credit hours of physical activity courses (all 1139-1197 courses), and a maximum of 4 credit hours of campus music organizations.
- A college maximum of six hours of individual studies courses (x193) can be applied toward graduation; some majors may have a lower maximum.
- Students of CFAES must complete an internship of 1-2 hours as a requirement for degree. Any additional internship credit hours may count towards major hours (consult with your advisor). A college maximum of six hours of internship credit can be applied toward graduation; some majors may have a lower maximum.
- A maximum of three credits of 3488 can be applied toward graduation although some majors may have a lower maximum. A cumulative point-hour ratio of 2.0 is required to register for 3488 credit.
- Credit hours for 4999 ("with Research Distinction") and 4999H ("with Honors Research Distinction") are repeatable to maximum of six hours.
- **An application for degree must be submitted online at least two semesters prior to the intended graduation term. Application found at: <https://students.cfaes.ohio-state.edu/academics/undergraduate/graduation>**

Policies and General Requirements for Minors/Minor Equivalent

- The minor/minor equivalent must contain a minimum of 12 credit hours distinct from the major and/or additional minors (i.e., if a minor requires more than 12 credit hours, a student is permitted to overlap those hours beyond 12 with the major or with another minor).
- A 2.00 cumulative point-hour ratio is required in the minor/minor equivalent with a minimum C- grade for any course to be listed in the minor or minor equivalent (includes transfer credit).
- For programs requiring a minor: minors should be declared by the time students complete 60 hours.
- A student is permitted to count up to 6 credit-hours of transfer and/or EM credit in the minor or minor equivalent.
- Coursework graded Pass/Non-Pass cannot count in the minor. No more than 3 credit-hours of course work graded S/U may count toward the minor. Maximum of 3 credit-hours of xx93 are allowed to count in the minor.