

KENT STATE UNIVERSITY

CERTIFICATION OF CURRICULUM PROPOSAL

Preparation Date **5-Oct-17**

Curriculum Bulletin _____

Effective Date **Fall 2018**

Approved by EPC _____

Department **Biological Sciences**
 College **AS - Arts and Sciences**
 Degree **MS - Master of Science**
 Program Name **Biological Sciences-Ecology** Program Banner Code **ECOL**
 Concentration(s) _____ Concentration(s) Banner Code(s) _____
 Proposal **Revise program**

Description of proposal:

We propose to change the name of the Biological Sciences-Ecology program to Biological Sciences- Ecology and Evolutionary Biology.

[CBSEE]

This name change better reflects the direction of the field.

Does proposed revision change program's total credit hours? ☐ Yes ☒ NoCurrent total credit hours: 32 Proposed total credit hours 32

Describe impact on other programs, policies or procedures (e.g., duplication issues; enrollment and staffing considerations; need; audience; prerequisites; teacher education licensure):

No impact.

Units consulted (other departments, programs or campuses affected by this proposal):

These changes will not affect any other units

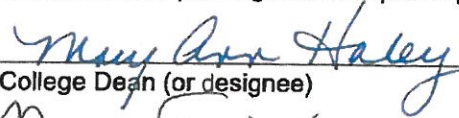
REQUIRED ENDORSEMENTS


 Department Chair / School Director

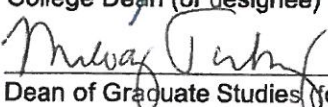
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 Campus Dean (for Regional Campuses proposals)

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 College Dean (or designee)

10 / 20 / 17


 Dean of Graduate Studies (for graduate proposals)

10 / 31 / 17

 Senior Vice President for Academic Affairs and Provost (or designee)

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Proposal Summary

Name Change and Curricular Updates to the Biological Sciences-Ecology [MS ECOL]

Description of Action, Including Intended Effect

Since the initial establishment of our MS program in Biological Sciences-Ecology the fields of biology have changed as has the research focus of our Department. In order to have highly qualified graduate applicants, which is directly connected to our ability to sustain high levels of research productivity, as measured by grants and peer-reviewed publications- we propose a degree title update to Biological Sciences-Ecology and Evolutionary Biology. The proposed title is consistent with our current and future research focus areas and will be more likely to appeal to the high quality students we are seeking.

Proposed Title Changes

- MS in Biological Sciences- Ecology changed to *Biological Sciences- Ecology and Evolutionary Biology*.

Proposed Curricular Changes

We will now require all Biological Sciences-Ecology students to take 60103 Biological Statistics and 60184 Responsible Conduct in Research in Teaching.

Impact on Other Programs, Course Offerings, Students, Faculty, Staff (e.g., duplication issues)

There will be no impact on other programs, course offerings, students, faculty, or staff.

Fiscal, Enrollment, Facilities and Staffing Considerations

There are no issues here.

Evidence of Need and Sustainability if Establishing

N/A

Provisions for Phase-Out if Inactivating

N/A

Timetable and Actions Required: *a chronology of actions required to approve the proposal with an anticipated implementation date for each action*

Departmental Approval	Spring 2017
A&S CCC Approval	Fall 2017
EPC Approval	Fall 2017
Effective Date	Fall 2018

BIOLOGICAL SCIENCES - ECOLOGY - M.S.

College of Arts and Sciences

Department of Biological Sciences

256 Cunningham Hall

Kent Campus

330-672-3613

kentbiology@kent.edu

www.kent.edu/biology

Description

The Master of Science degree in Biological Sciences—Ecology provides opportunities to study in areas such as animal behavior, entomology, limnology, microbial ecology, ornithology, systems ecology, systematic and evolutionary biology, environmental physiology, vertebrate ecology and population and community ecology. Although courses of study are tailored to students' interests and needs, the program for all students normally includes training in population, community, ecosystems and evolutionary ecology and statistical theory. Because of the interdisciplinary nature of ecology, students are encouraged to take courses in geology, mathematics, chemistry and other disciplines.

FULLY OFFERED AT:

Kent Campus

Admission Requirements

Official transcript(s)

*and Evolutionary
Biology*

and Evolutionary Biology

Minimum 3.0 GPA

GRE scores (general test)

Goal statement

Three letters of recommendation

A list of up to five potential faculty advisors

English Language Proficiency Requirements for International Students: All international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning a minimum 587 TOEFL score (94 on the Internet-based version), minimum 82 MELAB score, minimum 7.0 IELTS score or minimum 65 PTE Academic score. For more information on international admission, visit the [Office of Global Education's admission website](#). **Effective spring 2018.**

Before admission can be completed, a prospective student must be accepted by a faculty member in the ecology program who will serve as the advisor. The students also must have completed undergraduate coursework roughly equivalent to a Biology minor.

For more information about graduate admissions, please visit the [Graduate Studies](#) website.

Program Learning Outcomes

Graduates of this program will be able to:

- 1 Understand advanced biological concepts beyond the scope of the typical undergraduate degree, and increase the depth of their knowledge through coursework and hands-on experiences.
- 2 Apply scientific principles and appreciate work outside of their particular field.
- 3 Effectively communicate about science with colleagues as well as those outside of the student's area of expertise.

4 Develop the necessary laboratory skills that will allow testing of hypotheses.

Program Requirements

MAJOR REQUIREMENTS

[AS-MS-ECOL]

Major Requirements

3 out of 4 of
Choose from the following: 6

<u>BSCI 50370</u>	ECOLOGICAL AND EVOLUTIONARY GENETICS	
or <u>BSCI 50371</u>	EVOLUTIONARY BIOLOGY	
or <u>BSCI 50372</u>	COMMUNITIES AND ECOSYSTEMS	
or <u>BSCI 50373</u>	POPULATION AND COMMUNITY ECOLOGY	
<u>BSCI 60391</u>	SEMINAR IN ECOLOGY ✓	
✓ <u>BSCI 60184</u>	RESPONSIBLE CONDUCT IN RESEARCH AND TEACHING- BIOLOGICAL SCIENCES ²	0-2 2
<u>BSCI 60199</u>	THESIS 1 3	2-6 6
Additional Program Requirements ^{2,3} Additional electives as appropriate		17-19 9-11
Departmental Seminar Presented by Student ⁴ 5		

Minimum Total Credit Hours: 32

- 4 ✓ Students are required to enroll in BSCI 60391 every semester ~~until~~ ^{until} they graduate.
- 2 ~~1~~ ✓ Students ~~who will serve as teaching assistants~~ are required to take BSCI 60184 their first semester (or the following fall semester for those starting their studies in spring semester).
- 3 ~~4~~ ✓ After completing 6 credit hours of BSCI 60199, students must register continually for BSCI 60299 until the degree is earned. Students begin research by successfully preparing, presenting and defending a formal prospectus for their research project to their committee. For the thesis and final defense, it is expected that students will present the results of their study in a defense open to students and faculty. The thesis must be

* Course substitutions for a different graduate-level statistics can be made if deemed appropriate by the advisor/guidance committee. 14 hours of formal graded coursework is required.

presented and defended before the Guidance Committee with not more than one negative vote in order to be recommended to the Department of Biological Sciences and the College of Arts and Sciences for degree conferral.

5. * Students are required to present at least one departmental seminar about their research.



**Department of
Higher Education**

John R. Kasich, Governor
John Carey, Chancellor

**CHANGE REQUEST:
NAME MODIFICATION**

Date of submission: October 5, 2017

Name of institution: Kent State University

Previously approved title: Biological Sciences- Ecology- MS

Proposed new title: Biological Sciences- Ecology and Evolutionary Biology- MS

Proposed implementation date of the request: Fall 2018

Date that the request received final approval from the appropriate institutional committee:
[DATE] (Kent State University Board of Trustees)

Primary institutional contact for the request

Name: Melody J. Tankersley, PhD
Title: Senior Associate Provost and Dean of Graduate Studies
Phone: 330-672-8613
E-mail: mtankers@kent.edu

Educator Preparation Programs:

Leads to licensure: No [change to Yes if true]
Leads to endorsement: No

Explain the rationale for name change.

Since the initial establishment of our MS program in Biological Sciences-Ecology the fields of biology have changed as has the research focus of our Department. In order to have highly qualified graduate applicants, which is directly connected to our ability to sustain high levels of research productivity, as measured by grants and peer-reviewed publications- we propose a degree title update for Ecology. The proposed title and curricular changes are consistent with our current and future research focus areas and will be more likely to appeal to the high quality students we are seeking.

Describe how the name change will affect students in the current program.

The name change is still inclusive of the students we currently have in the program and thus will have no impact on current students in the program. Current students will be able to complete their program requirements as the courses will continue to be offered.

Describe any faculty, administrative or support service changes occurring along with the name change.

No support changes are required

BSC1
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Provide evidence that the appropriate accreditation agencies been informed of the proposed change (if applicable).

n/a

Describe how the effectiveness of the new curriculum will be monitored over time.

The effectiveness of our new curriculum will be evaluated by the quality of our applicant pool as well as the successful completion of our degree program. The first can be evaluated by average GPAs and GRE scores. The second can be evaluated by the time to degree completion.

Submit a comparison of the currently authorized curriculum and the proposed curriculum.

Previously Authorized Curriculum	Credit Hours	Proposed Curriculum	Credit Hours
Choose from the following: Ecological and Evolutionary Genetics, BSCI 50370 or Evolutionary Biology, BSCI 50371 or Communities and Ecosystems, BSCI 50372 or Population and Community Ecology, BSCI 50373	6	Choose 3 out of 4 of the following: Ecological and Evolutionary Genetics, BSCI 50370 or Evolutionary Biology, BSCI 50371 or Communities and Ecosystems, BSCI 50372 or Population and Community Ecology, BSCI 50373	6
Responsible Conduct in Research and Teaching, BSCI 60184	0-2	Responsible Conduct in Research and Teaching, BSCI 60184	2
Seminar each semester	1	Seminar in Ecology each semester, BSCI 60391	4-6
		Biological Statistics, BSCI 60103	3
Additional program requirements	17-19	Additional electives as appropriate*	9-11
Thesis I, BSCI 60199	2-6	Thesis I, BSCI 60199	6

*14 hours of formal graded coursework is required

Kent State University verifies that the information in this request is truthful and accurate.

Respectfully,

Todd A. Diacon, PhD
Senior Vice President for Academic Affairs and Provost

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