

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 **PHD - Doctor of Philosophy**
 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. [BSE]

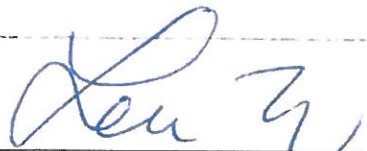

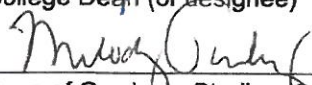
This name change better reflects the direction of the field.

Does proposed revision change program's total credit hours? Yes No
 Current total credit hours: 60/90 Proposed total credit hours 60/90

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	<u>10/5/17</u>
_____ Campus Dean (for Regional Campuses proposals)	<u>1/1</u>
 _____ College Dean (or designee)	<u>10/20/17</u>
 _____ Dean of Graduate Studies (for graduate proposals)	<u>10/31/17</u>
_____ Senior Vice President for Academic Affairs and Provost (or designee)	<u>1/1</u>

Proposal Summary
Name Change and Curricular Updates to the Biological Sciences-Ecology Program [PhD ECOL]

Description of Action, Including Intended Effect

Since the initial establishment of our PhD 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

- PhD 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 6/70103 Biological Statistics and 6/70184 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 - ECOLOGYⁿ *and Evolutionary Biology*

- PH.D.

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 Ph.D. 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)

GRE scores

Goal statement

Three letters of recommendation

A list of up five potential faculty advisors

Baccalaureate and a strong background in biology and related subjects such as chemistry and mathematics

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.**

Deficiencies at the time of admission shall be rectified during the first year of graduate study. 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.

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-PHD-ECOL]

Major Requirements

<u>BSCI 70184</u>	RESPONSIBLE CONDUCT IN RESEARCH AND TEACHING-BIOLOGICAL SCIENCES ¹	0-2	2 ✓
<u>BSCI 70370</u>	ECOLOGICAL AND EVOLUTIONARY GENETICS	2	
<u>BSCI 70371</u>	EVOLUTIONARY BIOLOGY	2	
<u>BSCI 70372</u>	COMMUNITIES AND ECOSYSTEMS	2	
<u>BSCI 70373</u>	POPULATION AND COMMUNITY ECOLOGY	2	
<u>BSCI 70391</u>	SEMINAR IN ECOLOGY ^{2,3}	1	3-6 ✓
<u>BSCI 80199</u>	DISSERTATION I ^{3,4}	30	
Additional Requirements ^{2,3}	<i>Electives as appropriate</i>	20-52	41-44 ✓
Departmental Seminar Presented by Student			5 ✓
Minimum Total Credit Hours for Post-Baccalaureate Students		90	
Minimum Total Credit Hours for Post-Master's Students		60	

BSCI 60103 | 70103 Biological Statistics (3)²

- 2/ ~~Students who will serve as teaching assistants are required to take BSCI 70184 their first semester (or the following fall semester for those starting their studies in spring semester).~~
- 3/ Students are required to enroll in BSCI 70391 every semester until they have passed their Candidacy exam.
- 4/ Each doctoral candidate, upon admission to candidacy, must register for BSCI 80199 for a total of 30 credit hours. It is expected that a doctoral candidate will continuously register for Dissertation I, and thereafter BSCI 80299, each semester, including summer, until all requirements for the degree have been met. It is expected that candidates will present the results of their research in a defense open to students and faculty, at which the dissertation will be presented and defended before the dissertation committee, with not more than one negative vote, in order to be recommended to the

20 hours of formal graded course work is required.

✓ Course substitutions for a different graduate-level statistics class can be made if deemed appropriate by the advisor/guidance committee.

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.

CANDIDACY

Students are admitted to doctoral candidacy following successful completion of both written and oral candidacy examinations. These exams are based on prior coursework and coursework taken in this graduate program as determined by the students' academic Guidance Committee, which must consist of at least three eligible faculty members. The advisor(s) and a majority of members of the Guidance Committee must be members of the appropriate graduate program. This committee is responsible for determining the students' academic curriculum and for administering the candidacy exams.



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-PhD

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

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 PhD 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.

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No support changes are required

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, GRE scores, and percentage of applicants with Master's degrees. 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
Ecological and Evolutionary Genetics, BSCI 5/70370	2	Ecological and Evolutionary Genetics, BSCI 5/70370	2
Evolutionary Biology, BSCI 5/70371	2	Evolutionary Biology, BSCI 5/70371	2
Communities and Ecosystems, BSCI 5/70372	2	Communities and Ecosystems, BSCI 5/70372	2
Population and Community Ecology, BSCI 5/70373	2	Population and Community Ecology, BSCI 5/70373	2
Responsible Conduct in Research and Teaching, BSCI 6/70184	0-2	Responsible Conduct in Research and Teaching, BSCI 6/70184	2
Seminar each semester until candidacy	1	Seminar in Ecology each semester until candidacy, BSCI 6/70391	3-6
		Biological Statistics, BSCI 6/70103	3
Additional Requirements	20-52	Additional electives as appropriate**	41-44
Dissertation I, BSCI 80199	30	Dissertation I, BSCI 80199	30

*60 hours post masters or 90 hours past baccalaureate degrees.

**20 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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