

# **New Program Report**

Date Submitted: 02/26/2021

Institution Lindenwood University

Site Information

### Implementation Date:

7/1/2021 12:00:00 AM

Added Site(s):

#### Selected Site(s):

Lindenwood University, 209 South Kingshighway, St. Charles, MO, 63301

**CIP** Information

CIP Code: 261310

#### **CIP Description:**

A program that focuses on the scientific study of the relationships and interactions across levels of biological organization--genes and genomes, organisms, species, and ecosystems--and how these change over time, including the origins and history of species, the processes by which biodiversity has evolved, and the ecological context in which this evolution takes place. Includes instruction in animal, plant, population, functional, evolutionary, and ecosystem ecology; ecological and evolutionary genetics; molecular evolution; population and conservation biology; animal and plant diversity; biometry; and scientific and research ethics.

CIP Program Title:

Ecology and Evolutionary Biology

Institution Program Title: Ecology and Evolutionary Biology

Degree Level/Type

**Degree Level:** Bachelor's Degree

**Degree Type:** Bachelor of Science

**Options Added:** Collaborative Program:

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Mode of Delivery

Current Mode of Delivery

Classroom

**Student Preparation** 



# **New Program Report**

Special Admissions Procedure or Student Qualifications required: No special admissions procedures required.

Specific Population Characteristics to be served: n/a

**Faculty Characteristics** 

Special Requirements for Assignment of Teaching for this Degree/Certificate: Terminal degree

Estimate Percentage of Credit Hours that will be assigned to full time faculty: 75%

Expectations for professional activities, special student contact, teaching/learning innovation: N/A

Student Enrollment Pro	iections Year One-Five
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Year 1	Full Time: 9	Part Time: 1	
Year 2	Full Time: 14	Part Time: 1	
Year 3	Full Time: 18	Part Time: 2	Number of Graduates: 5
Year 4	Full Time: 27	Part Time: 3	
Year 5	Full Time: 36	Part Time: 4	Number of Graduates: 35

#### Percentage Statement:

n/a

#### **Program Accreditation**

Institutional Plans for Accreditation:

Currently, there is no accrediting body in the biological sciences.

**Program Structure** 

**Total Credits:** 

120

**Residency Requirements:** 

N/A

**General Education Total Credits:** 

42

#### Major Requirements Total Credits:

67

Course(s) Added

COURSE NUMBER	CREDITS	COURSE TITLE
BSC 24000	4	Introduction to Biological Diversity
BSC 28500	1	Methods and Writing for Biology



# **New Program Report**

BSC 48800	2	Genetics of Evolution
CHM 23100	3	General Chemistry II
CHM 23000	3	General Chemistry I
BSC 46400	3	Evolution
MTH 17300	4	Survey Calculus
CHM 24100	1	General Chemistry Lab II
BSC 46500	4	General Ecology
CHM 23200	3	General Chemistry III
BSC 24800	4	Introduction to Ecology and Evolution
CHM 36100	4	Organic Chemistry I
CHM 24200	1	General Chemistry Lab III
MTH 24100	3	Stats for Natural Sciences
CHM 36200	4	Organic Chemistry II
BSC 24400	4	Introduction to Cellular and Molecular Biology

#### Free Elective Credits:

11

#### Internship or other Capstone Experience: BSC 48800 Genetics of Evolution

#### Assurances

I certify that the program will not unnecessarily duplicate an existing program within the geographically applicable area.

I certify that the program will build upon existing programs and faculty expertise.

I certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful. Institutions' decision to implement a program shall be based upon demand and/or need for the program in terms of meeting present and future needs of the locale, state, and nation based upon societal needs, and/or student needs.

**Contact Information** 

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# NEW PROGRAM PROPOSAL FOR ROUTINE REVIEW

Sponsoring Institution: Lindenwood University
Program Title: Ecology and Evolutionary Biology
Degree/Certificate: BS-Bachelor of Science If other, please list:
Options:
Delivery Site(s): St. Charles
CIP Classification: *CIP Code can be cross-referenced with programs offered in your region on <u>MDHE's program inventory</u> . <u>Click here for link to NCES CIP site</u> .
Implementation Date       07/2021       please use MM/YY date format.
Is this a new off-site location? No 🔀 Yes
If yes, is the new off-site location within your institution's current CBHE-approved service region? Yes
*If no, public institutions should consult the comprehensive review process.
Is this a collaborative program? Yes No X If yes, please complete the collaborative programs form on page 6.
CERTIFICATIONS:
The program is within the institution's CBHE approved mission. (public institutions only)
The program will be offered within the institution's CBHE approved service region. (public institutions only)
The program builds upon existing programs and faculty expertise.
The program does not unnecessarily duplicate an existing program in the geographically applicable area.
The program can be launched with minimal expense and falls within the institution's current operating budget. <i>(public institutions only)</i>
AUTHORIZATION:

Name/Title of Institutional Officer

Signature

Date

# PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Although the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Qualifications of performance goals should be included wherever possible.

*If you need more than one line of text to answer questions 1–5, please attach a Word .doc.* 

## 1. Student Preparation

• Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.

no special preparation will be required

• Characteristics of a specific population to be served, if applicable.

N/A

## 2. Faculty Characteristics

• Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.

terminal degree

• Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.

75%

• Expectations for professional activities, special student contact, teaching/learning innovation.

N/A

#### 3. Enrollment Projections

• Student FTE majoring in program by the end of five years.

75

• Percent of full time and part time enrollment by the end of five years.

90% full time enrollment and 10% part time enrollment

## STUDENT ENROLLMENT PROJECTIONS

YEAR	1	2	3	4	5
FULL TIME	9	14	18	27	36
PART TIME	1	1	2	3	4
TOTAL	10	15	20	30	40

## 4. Student and Program Outcomes

• Number of graduates per annum at three and five years after implementation.

at 3 years - 5 student graduates; at 5 years - 35 student graduates

• Special skills specific to the program.

biology

- Proportion of students who will achieve licensing, certification, or registration.
- Performance on national and/or local assessments, e.g. percent of students scoring above the 50<sup>th</sup> percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.

N/A

- Placement rates in related fields, in other fields, unemployed.
- Transfer rates, continuous study.

# 5. Program Accreditation

• Institutional plans for accreditation, if applicable, including accrediting agency and timeline. If there are no plans to seek specialized accreditation, please provide a rationale

there is no accrediting body in the biological sciences

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# 6. Program Structure

- A. Total credits required for graduation: <u>120 credits</u>
- B. Residency requirements, if any: N/A

C. General education: Total credits: 42 credits

# *Courses (specific courses OR distribution area and credits)*

Course Number	Credits	Course Title
English composition	6	
US History or Govern	3	
Social Science	3	
Human Culture	6	
Arts	3	
Literature	3	

# D. Major requirements: Total credits: 67

Course Number	Credits	Course Title		
BSC 24000	4	Introduction to Biological Diversity		
BSC 24400	4	Introduction to Cellular and Molecular Biology		
BSC 24800	4	Introduction to Ecology and Evolution		
BSC 28500	1	Methods and Writing for Biology		
BSC 46400	3	Evolution		
BSC 46500	4	General Ecology		
BSC 48800	2	Genetics of Evolution		
CHM 23000	3	General Chemistry 1		
CHM 23100	3	General Chemistry 2		
CHM 24100	1	General Chemistry 2 lab		
CHM 23200	3	General Chemistry 3		
CHM 24200	1	General Chemistry 3 lab		
CHM 36100	4	Organic Chemistry 1		
CHM 36200	4	Organic Chemistry 2		
MTH 24100	3	Stats for Natural Sciences		
MTH 17300	4	Survey Calculus		

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E. Free elective credits: <sup>11</sup> (sum of C, D, and E should equal A)

- F. Requirements for thesis, internship or other capstone experience: BSC 48800 Genetics of Evolution
- G. Any unique features such as interdepartmental cooperation:

## 7. Need/Demand

Student demand

Market demand

Societal need

I hereby certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful.

On July 1, 2011, the Coordinating Board for Higher Education began provisionally approving all new programs with a subsequent review and consideration for full approval after five years.

# **COLLABORATIVE PROGRAMS**

Sponsoring Institution One:		
Sponsoring Institution Two:		
Other Collaborative Institutions:		

Length of Agreement:

If you need more than two lines of text to answer questions 1–5, please attach a word.doc.

1. Which institution (s) will have degree-granting authority?

2. Which institution (s) will have the authority for faculty hiring, course assignment, evaluation and reappointment decisions?

3. What agreements exist to ensure that faculty from all participating institutions will be involved in decisions about the curriculum, admissions standards, exit requirements?

4. Which institution(s) will be responsible for academic and student-support services, e.g., registration, advising, library, academic assistance, financial aid, etc.?

5. What agreements exist to ensure that the academic calendars of the participating institutions have been aligned as needed?