



- ☐ PUBLIC  
☒ INDEPENDENT

### NEW PROGRAM PROPOSAL FOR ROUTINE REVIEW

*When finished, please save and email to: [he.academicprogramactions@dhe.mo.gov](mailto:he.academicprogramactions@dhe.mo.gov)*

**Sponsoring Institution:**

**Program Title:** Biology

**Degree/Certificate:**

**If other, please list:**

**Options:**

**Delivery Site:** Cottey College campus

**CIP Classification:** 260101

**Implementation Date:** 1/1/2018

**Is this a new off-site location?** ☐ Yes ☒ No

**If yes, is the new location within your institution's current CBHE-approved service region?** ☐

*\*If no, public institutions should consult the comprehensive review process*


**Is this a collaborative program?** ☐ Yes ☒ No

*\*If yes, please complete the collaborative programs form on last page.*

### CERTIFICATIONS

- ☐ The program is within the institution's CBHE approved mission. *(public only)*
- ☐ The program will be offered within the institution's CBHE approved service region. *(public 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. *(public only)*

### AUTHORIZATION

Chioma Ugochukwu, Ph.D. Vice President for Academic Affairs		
Name/Title of Institutional Officer	Signature	Date

## **PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS**

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Although all of 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.

Quantification of performance goals should be included wherever possible.

### **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.  
None
- Characteristics of a specific population to be served, if applicable.  
Because Cottey College is a women's college, this program will be serving female students. In the US job market, there is an ever-increasing demand for employees with a background in the STEM (Science, Technology, Engineering, and Math) fields. By developing an innovative program in Biology, Cottey is in a unique position to produce highly skilled scientific workers who are women to meet that demand.

### **2. Faculty Characteristics**

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.  
The full time faculty teaching in this program would have a Ph.D. in Biology with the minimal qualifications being a master's degree with at least 18 graduate hours in biology. Any part time faculty teaching courses in the biology degree program would be required to have at least 18 graduate hours in Biology.
- 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.  
Full time faculty would teach the majority of the courses in this program, likely 85-90%
- Expectations for professional activities, special student contact, teaching/learning innovation.  
Full time faculty would be expected to mentor students as advisors and in the field, most specifically for the capstone course. They would be expected to attend conferences in the discipline, ideally promoting student participation as well.

### **3. Enrollment Projections**

- Student FTE majoring in program by the end of five years.  
40
- Percent of full time and part time enrollment by the end of five years.  
95% full time and 5% part time

## STUDENT ENROLLMENT PROJECTIONS

YEAR	1	2	3	4	5
Full Time	7	14	21	30	40
Part Time	0	0	0	0	0
Total	7	14	21	30	40

### 4. Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation.  
10 at three years and 18 at five years
- Special skills specific to the program.  
[Click here to enter text](#)
- Proportion of students who will achieve licensing, certification, or registration.  
Not Applicable
- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th 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.  
Not applicable
- Placement rates in related fields, in other fields, unemployed.  
Placement in related Fields: 60%; Other fields: 20%; Unemployed: 5%
- Transfer rates, continuous study.  
Pursuing a graduate or professional degree the year after graduation - 15%

### 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 rationale.  
Not Applicable

### 6. Program Structure

- A. Total credits required for graduation: 120
- B. Residency requirements, if any:  
45 credit hours
- C. General education: Total credits:  
27-29

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

Course Number	Credits	Course Title
FWS 101	3	First Year Writing Seminar
WRI 102	3	College Writing 2
MAT 103	3	College Algebra or higher
Science lecture and lab	4-5	AST/BIO/CHE/PHY options
Fine Arts Division	3	Select courses from the Fine Arts Division
Humanities Division	3	Select courses from the Humanities Division
Social Science Div.	3	Select courses from Social Sciences Division
Wellness requirement	2-3	Dance/PE Activity course (2 credits) OR Theory/Activity PHE 139 Lifetime Fitness Concepts (3 credits)
Women, Gender, and Sexuality Studies	3	May be taken as part of another requirement

D. Major requirements: Total credits: 71-72

Course Number	Credits	Course Title
<b>Science 1</b>		30 hours required
BIO 107/L	4	Principles of Biology
BIO 204/L	4	Genetics
BIO 207/L	4	Zoology
CHE 210/1	5	General Chemistry 1
CHE 212/3	5	General Chemistry 2
PHY 101	4	Introduction to Physics
PHY 205	4	General Physics
BIO 107/L	4	Principles of Biology
<b>Science II</b>		24 hours required (at least 4 courses must have a lab component)
BIO 115	3	Human Nutrition
BIO 120	3	Environmental Science
BIO 125/L	4	Botany 4
BIO 211/L	4	Anatomy & Phys 1
BIO 212/L	4	Anatomy & Phys 2
BIO 240/L	4	Microbiology
BIO 301/L	4	Molecular Biology
CHE 340/L	4	Biochemistry
HSC 440	3	Molec. Mech. Disease
<b>Mathematics</b>		3-4 hours required
MAT 112	3	Elementary Statistics
MAT 201	4	Calculus I
<b>Social Sciences</b>		3 hours required
ENV 315	3	Ecosystems, Fnct, and Mgnt

ENV 335	3	Earth Sci: Soil, Water and Atm
PSY 235	3	Biopsychology
PSY 335	3	Drugs and Behavior 3
<b>Writing</b>		3 hours required
XXX	3	Writing intensive course, 200-level or above.
<b>Experiential Learning</b>		3 hours required
XXX	3	Experiential learning: Internship, directed study, or independent research
<b>Seminar &amp; Capstone</b>	5	5 hours required
BIO 190	1	Introduction to Scientific Literature
BIO 390	1	Communicating Science
BIO 490	3	Capstone

E. Free elective credits: 19-22

*(sum of C, D, and E should equal A)*

F. Requirements for thesis, internship or other capstone experience:

Capstone course and project

G. Any unique features such as interdepartmental cooperation:

[Click here to enter text](#)

## 7. Need/Demand

☒ Student demand

☒ Market demand

☒ Societal demand

☒ 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

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- **Sponsoring Institution One:**
- **Sponsoring Institution Two:**
- **Other Collaborative Institutions:**
- **Length of Agreement:**
- **Which institution(s) will have degree-granting authority?**
- **Which institution(s) will have the authority for faculty hiring, course assignment, evaluation and reappointment decisions?**
- **What agreements exist to ensure that faculty from all participating institutions will be involved in decisions about the curriculum, admissions standards, exit requirements?**
- **Which institution(s) will be responsible for academic and student-support services, e.g., registration, advising, library, academic assistance, financial aid, etc.?**
- **What agreements exist to ensure that the academic calendars of the participating institutions have been aligned as needed?**

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