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NEW PROGRAM PROPOSAL FOR ROUTINE REVIEW

Sponsoring Institution: University of Central Missouri

Accelerated Program, M.A. in Science Education and B.S. in Biology

Program Title: _____

Degree/Certificate: MA-Master of Arts **If other, please list:** BS-Biology

Options: _____

university of Central Missouri at Warrensburg

Delivery Site(s): _____

CIP Classification: 131316

**CIP Code can be cross-referenced with programs offered in your region on [MDHE's program inventory](#).
[Click here for link to NCES CIP site.](#)*

08/2018

Implementation Date _____ *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 *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. *(public institutions only)*

AUTHORIZATION:

Doug Koch/Vice Provost

3/23/2018

Name/Title of Institutional Officer	Signature	Date
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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.

Students having completed at least 9 hours of Biology courses with the GPA of at least 3.00.

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

Students who have a science background and would like to become a science teacher.

2. Faculty Characteristics

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

PhD in related fields, or a master degree in related fields with extended related experiences.

- 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.

All courses will be taught by full-time faculty.

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

professionally active, as evidenced by peer reviewed publications. Attend and/or present at professional meetings.

3. Enrollment Projections

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

15

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

100% full time

STUDENT ENROLLMENT PROJECTIONS

YEAR	1	2	3	4	5
FULL TIME	2*	5*	10*	15*	15*
PART TIME					
TOTAL	2	5	10	15	15

4. Student and Program Outcomes

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

At three years: 3, at five years:7

- Special skills specific to the program.

understand the knowledge of biology, Perform simple biology investigation, teach biology

- Proportion of students who will achieve licensing, certification, or registration.

100 %

- 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.

Our students typically score above the 50 percentile in MOCA exam (required for teaching certificate). Scores on the General Ed. Assessment (GEA) for these students are typically above the 50th percentile.

- Placement rates in related fields, in other fields, unemployed.

Similar to our current BSE graduates, nearly 100% of our completers will secure a science teaching position.

- Transfer rates, continuous study.

Currently about 50% of our students in science programs are transfer students.

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

similar to our BSE in science ed, this new program will have NSTA National recognition.

* Projection for MA in Science education which is fed from both BS in Biology and Chemistry

6. Program Structure

140-147 for both Bachelor and Master level

A. Total credits required for graduation: _____

B. Residency requirements, if any: N/A _____

32-33, for the BS portion

C. General education: Total credits: _____

Courses (specific courses OR distribution area and credits)

Course Number	Credits	Course Title
is attached		

73-81 for the BS level, 33 for the MA level

D. Major requirements: Total credits: _____

Course Number	Credits	Course Title
is attached		

0-2

E. Free elective credits: _____
(sum of C, D, and E should equal A)

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

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: _____

Please note: 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?

Accelerated Program: B.S. in Biology and M.A in Science Education

At the completion of the 140- to 147-hour program, and not before, the student will earn a B.S. degree in Biology and an M.A. degree in Science Education. In addition to knowledge and skills that are listed in the regular B.S. degree in Biology, the graduate students with both mentioned degrees will be able to:

- Interpret and interrelate important science concepts, ideas, and applications in the fields of licensure.
- Recognize and employ science-learning approaches for all students.
- Plan for engaging all students in science learning by setting appropriate goals that are consistent with theories of learning as well as national science standards.
- Create safe science lab environments for students.
- Conduct preliminary data collection and present evidence of student science learning as a result of the instruction.
- Propose an educational research study about challenges of learning science in science classroom settings.
- Participate in research and professional development opportunities in both areas of science and science education.

UCM students having completed at least 9 hours of biology courses with a GPA of at least 3.00 may consult with the coordinator of the MA/BS accelerated program and complete a departmental application to declare the accelerated BS/MA major. To continue with the graduate portion of the program, students must have a GPA of 3.00 or above in the undergraduate major required courses. Prior to beginning the graduate portion of the program, students will need to apply to the UCM Graduate School for formal admittance to the accelerated program. Upon completion of this program, students will be eligible for science teaching certification in straight Biology or Unified Science: Biology.

Undergrad Major Requirements ----- 73-81

General Science -----33-41

² BIOL 2020 General Ecology	3
BIOL 1112 Animal Biology, 4, or	
BIOL 1111 Plant Biology, 4	4
GE-PHYS 1101 College Physics I.....	4
GE-EASC 1004 Introduction to Geology.....	4
GE-MATH 1111 College Algebra.....	3
GE-CHEM 1131 General Chemistry I.....	5
GE-STCH 1003 Great Concepts in Science	4
10 GE-STCH 3020 Science and Engineering Practices	3
1 GE-EASC 1114 Weather and Climate.....	4
1 PHYS 1102 College Physics II.....	4
GE-PSY 4230 Psychology of Children and Adolescence, 3 or	
PSY 3220 Life-Span Development, 3	3

¹ These credit hours are only required for those students interested in *unified science* certification.

² This course has a prerequisite.

¹⁰ Competency 10 course

General Biology-----40

BIOL 1000 The Discipline of Biology	1
BIOL 1110 Principles of Biology,	3
BIOL 1111 Plant Biology, 4 or	
BIOL 1112 Animal Biology,4.....	4
BIOL 2512 Cell Biology	3
BIOL 4102 Evolution.....	3
*BIOL 2510 Basic Genetic, 3 or	
BIOL 3511 Genetics,4	3-4
*BIOL 3610 Basic Microbiology, 3 or	
BIOL 3611 Microbiology,4.....	3-4
CHEM 1132 General Chemistry II.....	5
BIOL 4001, Ecology Senior Seminar, 1 or	
BIOL 4002, Life Science Senior Seminar, 1.....	1
BIOL 4950 Laboratory Intern	1-2
**Any Approved Upper Level BIOL courses.....	10-13

* Only allowed if you have taken this course before being admitted to the program.

** Should meet minimum of 40 hours for general biology.

Graduate level courses -----33

EDFL 5120 Advanced Foundations of Education	3
EDFL 5208 Content Area Literacy.....	3
EDFL 5300 Advanced Assessment and Evaluation.....	3
EDFL 5330 Classroom Discipline and Motivation.....	3
EDSP 5200 Advanced Education of the Exceptional Child.....	3
STCH 4050 Science Teaching Methods.....	3
STCH 4010 Exploring Firsthand Science Lessons	2
STCH 4020 Internship in Science Teaching and Learning I.....	1
STCH 5900 Applied Research in Science Learning and Literacy	4
FLDX 4030 Internship in Science Teaching and Learning II	8

General Education -----32-33

All students must complete a minimum of 42 credits hours in general education. See pages 46-49 for full listing of requirements. Some General Education courses included in the major are used to satisfy General Education requirements, but additional courses within the same General Education categories are not.

Besides those listed above, the following General Education classes are required in this program: HIST 1350 History of US to 1877, 3 or

HIST 1351 History of US from 1877	3
POLS 1510 American Government	3
EDFL 2240 Educational Psychology.....	3

Free electives -----0-2

TOTAL -----140-147