

Ogden College of Science and Engineering  
Western Kentucky University  
Office of the Dean  
745-6371

**REPORT TO THE GRADUATE COUNCIL CURRICULUM COMMITTEE**

DATE: November 9, 2016

FROM: Ogden College of Science and Engineering

Ogden College of Science and Engineering Committee Members: Dr. Fred DeGraves, Dr. John Khouryieh, Dr. Michael Smith, Dr. Eric Conte, Dr. Mustafa Atici, Dr. Shane Palmquist, Dr. David Keeling, Dr. Dominic Lanphier, Dr. Sanju Gupta, Dr. Sharon Mutter

Chair: Dr. Cathleen Webb

The Ogden College of Science and Engineering submits the following item for consideration at the October Meeting.

Action	Proposal to Create a New Certificate Program Graduate Certificate in Biology Contact Person: Michael Smith, <a href="mailto:michael.smith@wku.edu">michael.smith@wku.edu</a> 5-2405
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**MINUTES – OCSE Graduate Curriculum Committee**

**October 12, 2016**

**Members Present:** Dr. Fred DeGraves, Dr. John Khouryieh, Dr. Mustafa Atici, Dr. Shane Palmquist, Dr. David Keeling, Dr. Dominic Lanphier, Dr. Sanju Gupta, Dr. Sharon Mutter

Dr. Cathleen Webb, Chair

Meeting was held via email

**OLD BUSINESS**

Palmquist/Khouryieh made a motion to approve the minutes from February, March and September. Approved unanimously.

**NEW BUSINESS**

**Consent Item**

No consent items on the agenda

**Action Agenda**

Palmquist/Khouryieh made a motion to approve the action item. Approved unanimously.

Proposal to Revise a Course, BIOL 522 – Systematics and Evolution

## Graduate Certificate Program in Biology - Create New (Action)

Date: 10/19/2016

College: Ogden College of Science and Engineering

Department: Biology

Contact Person: Michael Smith, [michael.smith1@wku.edu](mailto:michael.smith1@wku.edu), 270-745-2405

### 1. Identification of program:

- 1.1 Program title: Graduate Certificate in Biology
- 1.2 Required hours: 15
- 1.3 Program Description: This program is designed for individuals pursuing a career in biology who need up to 15 hours of graduate biology courses for professional training or accreditation. This certificate will equip its graduates with supplemental and enhanced knowledge and skills in biology to broaden their career opportunities.
- 1.4 Classification of Instructional Program Code (CIP): 26

**2. Learning outcomes of the proposed certificate program:** The objective of the certificate program is to provide students with in depth understanding of specialty fields in biology with enhanced credentials to enable them to gain employment or further training in biology. Specifically, students completing this certificate program should be able to clearly explain scientific methods used in particular sub-disciplines in the biological sciences, discuss advanced biological principles in scientific and applied frameworks, and how biology fits into a social context.

### 3. Rationale:

- 3.1 Reason for developing the proposed certificate program: In Kentucky and elsewhere, some secondary education teachers require at least 15 h of graduate credit in their subject in order to renew their certification or are allowed to teach that subject area, but a master's degree is not required. In addition, this program should provide training for students desiring jobs in rapidly expanding job markets such as biotechnology.
- 3.2 Relationship of the proposed certificate program to other programs now offered by the department: Courses available include those for other WKU Biology graduate programs. Since 30 h are required for both the Master of Science and Master of Arts in Education degrees in Biology at WKU, the certificate represents the half-way point for completion of a master's degree. The Biology Education for Teacher Leaders, Master of Arts in Education program requires 18 hours of coursework in Biology.
- 3.3 Relationship of the proposed certificate program to certificate programs offered in other departments: There are no other biology-specific certificate programs, although WKU does have some health-related certificate programs (e.g., Aging Studies, Emergency Nurse Practitioner, Family Nurse Practitioner, Worksite Health).
- 3.4 Projected enrollment in the proposed certificate program: 5/year
- 3.5 Similar certificate programs offered elsewhere in Kentucky and in other states (including programs at benchmark institutions): Two of WKU's benchmark institutions have similar certificate programs (Ball State University and Florida Atlantic University). While the University of Kentucky has much more narrow graduate certificate programs that are biologically-relevant (e.g., Anatomical Sciences, Biostatistics, Stream and Watershed Science, Physiology Teaching), no other Kentucky university offers a general graduate certificate in Biology.
- 3.6 Relationship of the proposed certificate program to the university mission and objectives: The certificate program will enhance student opportunities for employment in biology allowing them to be productive, engaged, and socially responsible citizen-leaders.

4. **Admission Criteria:** Admission into the WKU Graduate School, the minimum requirements of which is an earned bachelor's degree (or equivalent) and a 2.75 GPA (out of a 4.0 scale).
5. **Curriculum:** The certificate requires 15 semester hours of graduate biology credit (BIOL 400G or higher).
6. **Budget implications:** The certificate program will not put any additional costs or burdens upon the Biology Department or the university, as the courses being offered are already offered as part of the Master of Science degree in Biology. This program will be a good recruitment tool for students needing additional graduate credits, but are not yet ready for master's level graduate degree program. Students who have completed the certificate can apply the courses taken to a Master of Science degree in Biology if they are admitted into that program at a later date.
7. **Term of implementation:** Fall 2017
8. **Dates of committee approvals:**

Department	_____ 10/28/2016 _____
College Curriculum Committee	_____
Office of Academic Affairs (if ≥18 hour program)	_____
Professional Education Council (if applicable)	_____
Graduate Council	_____
University Senate	_____
Board of Regents	_____