



Request for Approval of Modification(s) to Program

First Name	Last Name	Person ID	Email
Rickey	Cothran	0725389	rickey.cothran@swosu.edu

Department

Biological & Biomed Sciences ▾

Program Information

Official Degree Designation and Program Title

e.g. Associate in Science in Cybersecurity, Bachelor of Fine Arts in Music Performance, Master of Science in Accounting

Bachelor of Science in Biology

Program Code

Please list the 3-digit OSRHE program code.

009

This program has approved options

Yes ▾

Approved Program Options

Please list all current options within the program. Use a separate line for each option.

Biological Sciences (BIOSC.BS)
Biomedical Sciences (BIOMS.BS)
Environmental and Organismal Biology (EVOGS.BS)

Is this program part of a cooperative agreement?

No ▾

Does this change impact an embedded certificate?

No ▾

Does the CIP Code for this program need to be updated?

No ▾

Type of Request(s)

Program Suspension?

No ▾

Electronic Delivery of Existing Program

NOTE: Electronic delivery is recognized at the program level. If the existing program has options that are offered via electronic delivery and the program meets State Regents' policy for electronic delivery, the program MUST be approved for electronic delivery.

No

Option Additions?

No

Option Deletion?

Option Name Change?

Yes

Current and Proposed Option Name(s)*

Please list the current option name(s) to be changed and the proposed name(s).

Environmental and Organismal Biology (EVOGS.BS) change to Environmental and Wildlife Biology (ENVWB.BS)

Justification for program name change

Please provide a brief summary of the reason for the change.

The new name is more reflective of the career paths pursued by graduates.

Program Requirement Change(s)?

Yes

Explanation of changes

Please provide a brief summary of changes being made.

We are adding a lab to the Ecology course. We are also adding a Research Methods in Biology course and removing the plant biology and field biology components of the major. Finally, we are adding a Herpetology course to the major electives, and we are adding Immunology and Pathogenic Microbiology to the Environmental and Organismal Biology Option.

Total Credit Hour Change?

No

Justification for program requirement changes*

Please provide a brief summary of the reason for the program requirement changes.

By adding a lab to Ecology we will be able to give all students in the program experience with plant and field biology. Students in the Environmental and Organismal Biology option will still be advised to take upper-division field and plant courses to fill out the electives in the option. The change keeps standards of giving students a comprehensive biology experience while providing students with more options when it comes to upper-division electives.

The Research Methods course will be taken by all new students (freshmen and transfer students) in the program. The course will provide students with activities to introduce them to supports and opportunities in the department and allow them to participate in a genuine, semester-long research experience. This experience will introduce them to the scientific process by doing science and build camaraderie within the cohort of majors.

We have offered Herpetology as a special topic course and it has received good enrollment. Students are clearly interested in the topic so we are adding it to the major electives pool.

We are adding Immunology and Pathogenic Microbiology to the Organismal and Environmental Biology Option because previous students use this option and often take these courses to prepare for vet school.

Program Reinstatement?

No ▾

Program Name Change?

No ▾

Degree Designation Change?

Changes formerly classified as substantive and non-substantive will now be combined as program requirement changes. (e.g. course credit hour changes, changes in courses required for graduation, changing credit hours required for electives, course prefix changes, course title changes, removing courses from list of electives)

No ▾

Documents

If applicable, submit any documentation related to the requested action.

Created By: Ryan Henson per Academic Affairs

Current Curriculum	Proposed Curriculum
<p>ENVIRONMENTAL AND ORGANISMAL BIOLOGY OPTION</p> <p>Biological Sciences Core Courses (Required).....16</p> <p>BIOL 1254 Principles of Biology II BIOL 3053 Cell Biology BIOL 3152 Genetics and Cell Biology Lab BIOL 3253 Genetics BIOL 3283 Ecology BIOL 4901 Biological Sciences Capstone</p> <p>Major Electives (include one Field Course [F] and one Plant Course [P]) 24</p> <p>BIOL 3074 Animal Behavior BIOL 3304 Aquatic Ecology [F] BIOL 3604 Biology of Insects [F] BIOL 3704 Human Anatomy BIOL 3814 Biology of Plants [P] BIOL 4001-4 Independent Studies in Biological Sciences <i>(A maximum of 4 hours total of Independent Studies may be counted toward the major.)</i></p> <p>BIOL 3355 General Microbiology BIOL 3363 Invertebrate Biology BIOL 4041-4 Special Topics in Environ & Organismal Biology BIOL 4154 Developmental Biology BIOL 4204 Vertebrate Biology [F] BIOL 4284 Parasitology BIOL 4293 Behavioral Neurobiology BIOL 4314 Environmental Biology BIOL 4343 Applied Microbiology BIOL 4454 Plant Taxonomy [P] BIOL 4463 Virology BIOL 4524 Environmental Microbiology [F] BIOL 4604 Terrestrial Ecology [P] BIOL 4622 Economically Important Plants [P] BIOL 4853 Evolution BIOL 4914 General and Comparative Physiology BIOL 4915 General & Comparative Anatomy & Physiology</p>	<p>ENVIRONMENTAL AND WILDLIFE BIOLOGY OPTION</p> <p>Biological Sciences Core Courses (Required).....19</p> <p>BIOL 1032 Research Methods in Biology BIOL 1254 Principles of Biology II BIOL 3053 Cell Biology BIOL 3152 Genetics and Cell Biology Lab BIOL 3253 Genetics BIOL 3284 Ecology BIOL 4901 Biological Sciences Capstone</p> <p>Major Electives (<i>include one Field Course [F] and one Plant Course [P]</i>) 21</p> <p>BIOL 3074 Animal Behavior BIOL 3304 Aquatic Ecology [F] BIOL 3604 Biology of Insects BIOL 3704 Human Anatomy BIOL 3814 Biology of Plants [P] BIOL 4001-4 Independent Studies BIOL 4010-4 Seminar in Biology <i>(A maximum of 4 hours total of Independent Studies and Seminar may be counted toward the major.)</i></p> <p>BIOL 3355 General Microbiology BIOL 3363 Invertebrate Biology BIOL 4041-4 Special Topics Environ & Organismal Biology BIOL 4154 Developmental Biology BIOL 4204 Vertebrate Biology [F] BIOL 4213 Immunology BIOL 4284 Parasitology BIOL 4293 Behavioral Neurobiology BIOL 4314 Environmental Biology BIOL 4324 Herpetology BIOL 4343 Applied Microbiology BIOL 4404 Pathogenic Microbiology BIOL 4454 Plant Taxonomy [P] BIOL 4463 Virology BIOL 4524 Environmental Microbiology [F] BIOL 4604 Terrestrial Ecology [P] BIOL 4622 Economically Important Plants [P] BIOL 4853 Evolution BIOL 4914 General and Comparative Physiology BIOL 4915 General and Comparative Anatomy and Physiology</p>

Current Curriculum	Proposed Curriculum
<p style="text-align: center;">BIOMEDICAL SCIENCE OPTION</p> <p>Biological Sciences Core Courses (Required).....16</p> <p>BIOL 1254 Principles of Biology II BIOL 3053 Cell Biology BIOL 3152 Genetics and Cell Biology Lab BIOL 3253 Genetics BIOL 3283 Ecology BIOL 4901 Biological Sciences Capstone</p> <p>Major Electives (include one Field Course [F] and one Plant Course [P]).....24</p> <p>BIOL 3074 Animal Behavior BIOL 3304 Aquatic Ecology [F] BIOL 3604 Biology of Insects BIOL 3704 Human Anatomy BIOL 3814 Biology of Plants [P] BIOL 4001-4 Independent Studies in Biological Sciences <i>(A maximum of 4 hours total of Independent Studies may be counted toward the major.)</i> BIOL 3355 General Microbiology BIOL 3363 Invertebrate Biology BIOL 4021-4 Special Topics in Biomedical Sciences BIOL 4154 Developmental Biology BIOL 4204 Vertebrate Biology [F] BIOL 4213 Immunology BIOL 4284 Parasitology BIOL 4284 Behavioral Neurobiology BIOL 4314 Environmental Biology BIOL 4404 Pathogenic Microbiology BIOL 4454 Plant Taxonomy [P] BIOL 4463 Virology BIOL 4524 Environmental Microbiology [F] BIOL 4604 Terrestrial Ecology [P] BIOL 4622 Economically Important Plants [P] BIOL 4703 Infectious Disease Epidemiology BIOL 4853 Evolution BIOL 4864 Human Genetics BIOL 4914 General and Comparative Physiology BIOL 4915 General and Comparative Anatomy and Physiology BIOL 4935 Cell and Molecular Biology BIOL 4944 Neuroscience</p>	<p style="text-align: center;">BIOMEDICAL SCIENCE OPTION</p> <p>Biological Sciences Core Courses (Required).....19</p> <p>BIOL 1032 Research Methods in Biology BIOL 1254 Principles of Biology II BIOL 3053 Cell Biology BIOL 3152 Genetics and Cell Biology Lab BIOL 3253 Genetics BIOL 3284 Ecology BIOL 4901 Biological Sciences Capstone</p> <p>Major Electives (include one Field Course [F] and one Plant Course [P]).....21</p> <p>BIOL 3074 Animal Behavior BIOL 3304 Aquatic Ecology [F] BIOL 3604 Biology of Insects BIOL 3704 Human Anatomy BIOL 3814 Biology of Plants [P] BIOL 4001-4 Independent Studies BIOL 4010-4 Seminar in Biology <i>(A maximum of 4 hours total of Independent Studies and Seminar may be counted toward the major.)</i> BIOL 3355 General Microbiology BIOL 3363 Invertebrate Biology BIOL 4021-4 Special Topics in Biomedical Sciences BIOL 4154 Developmental Biology BIOL 4204 Vertebrate Biology [F] BIOL 4213 Immunology BIOL 4284 Parasitology BIOL 4293 Behavioral Neurobiology BIOL 4314 Environmental Biology BIOL 4324 Herpetology BIOL 4404 Pathogenic Microbiology BIOL 4454 Plant Taxonomy [P] BIOL 4463 Virology BIOL 4524 Environmental Microbiology [F] BIOL 4604 Terrestrial Ecology [P] BIOL 4622 Economically Important Plants [P] BIOL 4703 Infectious Disease Epidemiology BIOL 4853 Evolution BIOL 4864 Human Genetics BIOL 4914 General and Comparative Physiology BIOL 4915 General and Comparative Anatomy and Physiology BIOL 4935 Cell and Molecular Biology BIOL 4944 Neuroscience</p>

Current Curriculum		Proposed Curriculum	
BIOLOGICAL SCIENCES MAJOR			
Required Courses..... 16		Required Courses..... 19	
BIOL 1254 Principles of Biology II		BIOL 1032 Research Methods in Biology	
BIOL 3053 Cell Biology		BIOL 1254 Principles of Biology II	
BIOL 3152 Genetics and Cell Biology Lab		BIOL 3053 Cell Biology	
BIOL 3253 Genetics		BIOL 3152 Genetics and Cell Biology Lab	
BIOL 3283 Ecology		BIOL 3253 Genetics	
BIOL 4901 Biological Sciences Capstone		BIOL 3284 Ecology	
Major Electives..... 24		BIOL 4901 Biological Sciences Capstone	
(Electives must include one Field Course [F] or a field course with lab from the Gulf Coast Research Lab or other field station or lab and one Plant Course [P].)			
BIOL 3012 Biological Terminology		BIOL 3012 Biological Terminology	
BIOL 3074 Animal Behavior		BIOL 3074 Animal Behavior	
BIOL 3304 Aquatic Ecology [F]		BIOL 3304 Aquatic Ecology [F]	
BIOL 3604 Biology of Insects		BIOL 3604 Biology of Insects	
BIOL 3704 Human Anatomy		BIOL 3704 Human Anatomy	
BIOL 3814 Biology of Plants [P]		BIOL 3814 Biology of Plants [P]	
BIOL 3904 Human Physiology		BIOL 3904 Human Physiology	
BIOL 4001-4 Independent Studies		BIOL 4001-4 Independent Studies	
BIOL 4010-4 Seminar in Biology		BIOL 4010-4 Seminar in Biology	
<i>(A maximum of 4 hours total of Independent Studies and Seminar may be counted toward the major.)</i>			
BIOL 3355 General Microbiology		<i>(A maximum of 4 hours total of Independent Studies and Seminar may be counted toward the major.)</i>	
BIOL 3363 Invertebrate Biology		BIOL 3355 General Microbiology	
BIOL 4021-4 Special Topics in Biomedical Sciences		BIOL 3363 Invertebrate Biology	
BIOL 4031-4 Special Topics in Microbiology		BIOL 4021-4 Special Topics in Biomedical Sciences	
BIOL 4041-4 Special Topics Environ & Organismal Biology		BIOL 4031-4 Special Topics in Microbiology	
BIOL 4154 Developmental Biology		BIOL 4041-4 Special Topics Environ & Organismal Biology	
BIOL 4204 Vertebrate Biology [F]		BIOL 4154 Developmental Biology	
BIOL 4213 Immunology		BIOL 4204 Vertebrate Biology [F]	
BIOL 4284 Parasitology		BIOL 4213 Immunology	
BIOL 4293 Behavioral Neurobiology		BIOL 4284 Parasitology	
BIOL 4314 Environmental Biology		BIOL 4293 Behavioral Neurobiology	
BIOL 4343 Applied Microbiology		BIOL 4314 Environmental Biology	
BIOL 4404 Pathogenic Microbiology		BIOL 4324 Herpetology	
BIOL 4454 Plant Taxonomy [P]		BIOL 4343 Applied Microbiology	
BIOL 4463 Virology		BIOL 4404 Pathogenic Microbiology	
BIOL 4503 Microbial Physiology		BIOL 4454 Plant Taxonomy [P]	
BIOL 4524 Environmental Microbiology [F]		BIOL 4463 Virology	
BIOL 4604 Terrestrial Ecology [P]		BIOL 4503 Microbial Physiology	
BIOL 4622 Economically Important Plants [P]		BIOL 4524 Environmental Microbiology [F]	
BIOL 4703 Infectious Disease Epidemiology		BIOL 4604 Terrestrial Ecology [P]	
BIOL 4853 Evolution		BIOL 4622 Economically Important Plants [P]	
BIOL 4864 Human Genetics		BIOL 4703 Infectious Disease Epidemiology	
BIOL 4914 General and Comparative Physiology		BIOL 4853 Evolution	
BIOL 4915 General and Comparative Anatomy and Physiology		BIOL 4864 Human Genetics	
BIOL 4935 Cell and Molecular Biology		BIOL 4914 General and Comparative Physiology	
BIOL 4944 Neuroscience		BIOL 4915 General and Comparative Anatomy and Physiology	
		BIOL 4935 Cell and Molecular Biology	
		BIOL 4944 Neuroscience	

Package History

Date	User	Action
12/17/2024 11:50:40 AM	Cothran, Rickey	Added attachment 'BIOSC.BS.docx'
12/17/2024 11:50:40 AM	Cothran, Rickey	Added attachment 'BIOMS.BS.docx'
12/17/2024 11:50:40 AM	Cothran, Rickey	Added attachment 'EVOGS.BS.docx'
12/17/2024 11:50:40 AM	Cothran, Rickey	Submitted 'Program Modification'
12/17/2024 11:50:54 AM	Johnson, Jason	Received
12/17/2024 1:17:13 PM	Johnson, Jason	Decision Approved on step 'FLOW-Deans'
12/17/2024 1:17:26 PM	FLOW- Provost's Executive Assistant	Received