# **DEPARTMENT OF BIOLOGICAL SCIENCES\_**

#### **CURRICULUM CHANGE**

1. Type of Change: pre or corequisite; description

### 2. **From**:

D	Productive October
Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 75402
& Number	
Course Title	Comparative Morphology of Vascular Plants: Laboratory
Description	Comparative Morphology of Vascular Plants: Laboratory
Pre/ Co	Comparative Morphology of Vascular Plants: Lecture.
Requisites	
Credits	3
Hours	6
Liberal Arts	[X] Yes [] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
·	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate

Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 75402
Course Title	Comparative Morphology of Vascular Plants: Laboratory
Description	By reviewing historical trends in land plant developments from liverworts to angiosperms in a recitation format, students will further explore the morphology of vascular plants by experiments involving tissue culture, the creation of models, and the preparation of a collection of pressed specimens to illustrate key concepts,
Pre/ Co Requisites	BIO 75401
Credits	3
Hours	6
Liberal Arts	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X_ Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

- 4. <u>Rationale</u>: Error in citing the pre/co requisite. Title but not the course number is shown. Change is required to indicate the course number instead of the course title. Course description needed to be more specific.
- 5. Date of departmental approval: 02/14/18

# **DEPARTMENT OF BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change: pre or corequisite; description

#### 2. **From:**

2. <b>From:</b>	
Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 70606
& Number	
Course Title	Taxonomy of Vascular Plants: Laboratory
Description	Taxonomy of Vascular Plants: Laboratory
Pre/ Co	Taxonomy of Vascular Plants: Lecture.
Requisites	
Credits	2
Hours	4
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate

Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 70606
Course Title	Taxonomy of Vascular Plants: Laboratory
Description	Students will review key diagnostic features of the liverworts, mosses, hornworts, clubmosses, ferns, gymnosperms, and angiosperms in their currently understood phylogenetic arrangement. Field trips will be conducted to prepare a pressed collection of representative examples from key lineages including major angiosperm families.
Pre/ Co Requisites	BIO 70605
Credits	2
Hours	4
Liberal Arts	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X_ Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

- 4. <u>Rationale</u>: Error in citing the pre/corequisite. Title but not the course number is shown. Change is required to indicate the course number instead of the course title. Course description needed to be more specific.
- 5. Date of departmental approval: 02/14/18

# **DEPARTMENT OF BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change: pre or corequisite; description

### 2. **From**:

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 73002
& Number	
Course Title	Plant Physiology: Laboratory
Description	None
D / O	D. H DI. (B) . I. (
Pre/ Co	Problems in Plant Physiology:Lecture.
Requisites	
Credits	3
Hours	6
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Not Applicable   Required
Component	English Composition
Component	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

3. <u>To</u>:

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 73002
& Number	
Course Title	Plant Physiology: Laboratory
Description	Laboratory for exploring problems in plant physiology
Pre/ Co	BIO 73001
Requisites	
Credits	3
Hours	6
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flavible
	Flexible World Cultures
	World Cultures US Experience in its Diversity
	OS Experience in its Diversity Creative Expression
	Creative Expression Individual and Society
	Scientific World
	Goldhallo World
1	

- 4. **Rationale:** Error in citing the pre/corequisite. Title but not the course number is shown. Change is required to indicate the course number instead of the course title. Course description was missing from graduate bulletin.
- 5. Date of departmental approval: 02/14/18

# **DEPARTMENT OF BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change: pre or corequisite; description

### 2. **From**:

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 74502
& Number	
Course Title	Phytochemistry: Laboratory
Description	Phytochemistry: Laboratory
Pre/ Co	Phytochemistry: Lecture.
Requisites	
Credits	3
Hours	6
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flavible
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society Scientific World
	Scientific vvolid

Department(s)	Biological Sciences

Career	[ ] Undergraduate [X] Graduate
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Biology
Course Prefix	BIO 74502
& Number	3.0 1.002
Course Title	Phytochemistry: Laboratory
Description	Using experiments, students will learn how plant-derived chemicals are extracted, analyzed and studied.
Pre/ Co	BIO 74501
Requisites	
Credits	3
Hours	6
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. **Rationale:** Error in citing the pre/corequisite. Title but not the course number is shown. Change is required to indicate the course number instead of the course title. Course description needed to be more specific.

# **DEPARTMENT OF BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change: pre or corequisite

### 2. **From**:

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 76106
& Number	
Course Title	Fishes and Fisheries Biology: Laboratory
Description	Students will field collect in both freshwater and marine environments.
	Collections will be worked up using standard fisheries science
	techniques to evaluate diet, growth parameters, and population
D / O	dynamics. Analysis of data will be turned in as a final term project.
Pre/ Co	Fishes and Fisheries Biology: Lecture
Requisites	
Credits	3
Hours	6
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	V Nat Angliagha
General	X_ Not Applicable
Education	Required
Component	English Composition  Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

# 3. <u>To</u>:

0. <u>10</u> .					
Department(s)	Biological Sciences				
Career	[ ] Undergraduate [X] Graduate				
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial				
Subject Area	Biology				
Course Prefix	BIO 76106				
& Number					
Course Title	Fishes and Fisheries Biology: Laboratory				
Description	Students will field collect in both freshwater and marine environments. Collections will be worked up using standard fisheries science techniques to evaluate diet, growth parameters, and population dynamics. Analysis of data will be turned in as a final term project.				
Pre/ Co	BIO 76105				
Requisites					
Credits	3				
Hours	6				
Liberal Arts	[X] Yes [ ] No				
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA				
General	X_ Not Applicable				
Education	Required				
Component	English Composition Mathematics				
	Science				
	00161106				
	Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World				

4. **Rationale:** Error in citing the pre/corequisite. Title but not the course number is shown. Change is required to indicate the course number instead of the course title.

### **DEPARTMENT OF BIOLOGICAL SCIENCES\_**

#### **CURRICULUM CHANGE**

1. Type of Change: pre or corequisite; description

#### 2. **From:**

Department(s)	Biological Sciences			
Career	[ ] Undergraduate [X] Graduate			
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial			
	Diology			
Subject Area	Biology			
Course Prefix & Number	BIO 76114			
Course Title	Marine Ecology: Laboratory			
Description	Marine Ecology: Laboratory			
Pre/ Co	Marine Ecology: Lecture.			
Requisites				
Credits	2			
Hours	4			
Liberal Arts	[X] Yes [ ] No			
Course	NA			
Attribute (e.g.				
Writing				
Intensive,				
WAC, etc)				
General	X_ Not Applicable			
Education	Required			
Component	English Composition			
	Mathematics			
	Science			
	Flexible			
	World Cultures			
	US Experience in its Diversity			
	Creative Expression			
	Individual and Society			
	Scientific World			

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate

Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Biology
Course Prefix	BIO 76114
& Number	
Course Title	Marine Ecology: Laboratory
Description	Students will, using field collected material, examine such ecological principle as resource partitioning, growth and population dynamics of coastal marine organisms, niche partitioning, and community structure.  When possible, field trips to field sites will be incorporated. Students will learn how to apply Fishery Statistics to their studies and write these up as term projects for grade.
Pre/ Co	BIO 76113
Requisites	
Credits	2
Hours	4
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. **Rationale:** Error in citing the pre/corequisite. Title but not the course number is shown. Change is required to indicate the course number instead of the course title. Course description needed to be more specific.

# **DEPARTMENT OF BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change: pre or corequisite

### 2. **From**:

Department(s)	Biological Sciences				
Career	[ ] Undergraduate [X] Graduate				
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial				
Level					
Subject Area	Biology				
Course Prefix	BIO 76301				
& Number					
Course Title	Experimental Parasitology: Laboratory				
Description	Emphasis will be placed on the applications of modern procedure to the				
	study of parasitic organisms.				
Pre/ Co	Experimental Parasitology: Lecture.				
Requisites					
Credits	3				
Hours	4				
Liberal Arts	[X] Yes [ ] No				
Course	NA NA				
Attribute (e.g.					
Writing					
Intensive,					
WAC, etc)					
General	X_ Not Applicable				
Education	Required				
Component	English Composition				
	Mathematics				
	Science				
	Flexible				
	World Cultures				
	US Experience in its Diversity				
	Creative Expression				
	Individual and Society				
	Scientific World				

3. <u>To</u>:

Department(s)	Biological Sciences			
Career	[ ] Undergraduate [X] Graduate			
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial			
Level				
Subject Area	Biology			
Course Prefix	BIO 76301			
& Number				
Course Title	Experimental Parasitology: Laboratory			
Description	Emphasis will be placed on the applications of modern procedure to			
	the study of parasitic organisms.			
Pre/ Co	BIO 763			
Requisites				
Credits	3			
Hours	4			
Liberal Arts	[X] Yes [ ] No			
Course	NA			
Attribute (e.g.				
Writing				
Intensive,				
WAC, etc)	V NI (A P II			
General	X_ Not Applicable			
Education	Required			
Component	English Composition Mathematics			
	Science			
	Flexible			
	World Cultures			
	US Experience in its Diversity			
	Creative Expression			
	Individual and Society			
	Scientific World			

4. <u>Rationale:</u> Error in citing the pre/corequisite. Title but not the course number is shown. Change is required to indicate the course number instead of the course title.

# **DEPARTMENT OFBIOLOGICAL SCIENCES\_**

#### **CURRICULUM CHANGE**

1. Type of Change: pre or corequisite; description

### 2. **From**:

Department(s)	Biological Sciences					
Career	[ ] Undergraduate [X] Graduate					
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial					
Level						
Subject Area	Biology					
Course Prefix	BIO 77200					
& Number						
Course Title	Electron Microscopy Cytology: Laboratory					
Description	Electron Microscopy Cytology: Laboratory					
Pre/ Co	Cell Biology: Lecture.					
Requisites						
Credits	4					
Hours	8					
Liberal Arts	[X] Yes [ ] No					
Course	NA					
Attribute (e.g.						
Writing						
Intensive,						
WAC, etc)						
General	X_ Not Applicable					
Education	Required					
Component	English Composition					
	Mathematics					
	Science					
	Flexible					
	World Cultures					
	US Experience in its Diversity					
	Creative Expression					
	Individual and Society					
	Scientific World					
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Department(s)	Biological Sciences

Career	[ ] Undergraduate [X] Graduate					
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial					
Subject Area	Biology					
Course Prefix & Number	BIO 77200					
Course Title	Electron Microscopy Cytology: Laboratory					
Description	Review of key concepts in preparation of material for both the Scanning Electron Microscope and the Transmission Electron Microscope, which will be examined and photographed. Material will be used to compile a laboratory notebook as the basis of a semester-long project to identify and measure organelles and structures characteristic to each sample at hand.					
Pre/ Co	BIO 77003					
Requisites						
Credits	4					
Hours	8					
Liberal Arts	[X] Yes [ ] No					
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA					
General	X_ Not Applicable					
Education Component	Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World					

4. **Rationale:** Error in citing the pre/corequisite. Title but not the course number is shown. Change is required to indicate the course number instead of the course title. Course description needed to be more specific.

# **DEPARTMENT OF BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change: pre or corequisite

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Department(s)	Biological Sciences				
Career	[ ] Undergraduate [X] Graduate				
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial				
Subject Area	Biology				
Course Prefix & Number	BIO 78002				
Course Title	Mathematical Biology: Laboratory				
Description	Biometry data analysis and graphics.				
Pre/ Co Requisites	NA				
Credits	2 or 3				
Hours	4 or 6				
Liberal Arts	[X] Yes [ ] No				
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA				
General Education Component	X_ Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World				

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Department(s)	Biological Sciences

Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 78002
& Number	
Course Title	Mathematical Biology: Laboratory
Description	Biometry data analysis and graphics.
Pre/ Co	BIO 78001
Requisites	
Credits	2 or 3
Hours	4 or 6
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World
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4. **Rationale:** All Bio lab courses should have lecture as a prerequiste/corequisite, so students gain hands-on experience of the materials covered in lecture. This particular course did have a prerequiste/corequisite listed, which is an error. Title but not the course number is shown. Change is required to indicate the course number instead of the course title.

# **DEPARTMENT OF BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change: pre or corequisite; description

### 2. **From**:

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 76502
& Number	
Course Title	Paleobotany: Laboratory
Description	Paleobotany: Laboratory
Pre/ Co	NA
Requisites	
Credits	2
Hours	4
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World
	33.33 773.13

Department(s)	Biological Sciences

Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 76502
& Number	
Course Title	Paleobotany: Laboratory
Description	Students will study plant fossils in the laboratory from the microscopic to macroscopic scales.
Pre/ Co	BIO 76501
Requisites	
Credits	2
Hours	4
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale</u>: Error in citing the pre/corequisite. Title but not the course number is shown. Change is required to indicate the course number instead of the course title. Course description needed to be more specific.

# **DEPARTMENT OF BIOLOGICAL SCIENCES\_**

#### **CURRICULUM CHANGE**

1. Type of Change: pre or corequisite; description

### 2. **From**:

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 76404
& Number	
Course Title	Plant Ecology: Laboratory
Description	Plant Ecology: Laboratory
Pre/ Co	
Requisites	
Credits	3
Hours	NONE
Liberal Arts	[X] Yes [ ] No
Course	NONE
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

Department(s)	Biological Sciences

Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 76404
& Number	
Course Title	Plant Ecology: Laboratory
Description	Using field studies and laboratory experiments, students will become
	familiar with common plants and ecosystems of the region, how they
	react to perturbation, and how they remain resilient.
Pre/ Co	BIO 76403
Requisites	
Credits	3
Hours	<u>3</u>
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	X_ Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

4. <u>Rationale</u>: Error in citing the pre/corequisite. Title but not the course number is shown. Change is required to indicate the course number instead of the course title. Hours were missing and must be added. Course description needed to be more specific.

### **DEPARTMENT OF BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change: Course not listed in the graduate bulletin

### 2. **From**:

Department(s)	Biological Sciences
Career	[ ] Undergraduate [ ] Graduate
Academic	[ ] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	Course not listed in the graduate bulletin
& Number	
Course Title	
Description	
Pre/ Co	
Requisites	
Credits	
Hours	
Liberal Arts	[]Yes []No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	
General	Not Applicable
Education	Required
Component	English Composition
	Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society Scientific World
	Scientific World

<u></u>	
Department(s)	Biological Sciences

Career	[ ] Undergraduate [X] Graduate
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 618
Course Title	Problems in Ecology
Description	Recent advances in ecology in urban environments will be explored in relation to population and community interactions, the nature of the niche, endangered species, non-natives, threats to the biosphere, and possible modes of recovery Fieldwork will be devoted to observing different urban ecosystems for gathering and interpreting data.
Pre/ Co	NA
Requisites	
Credits	4
Hours	<u>6</u>
Liberal Arts	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X_ Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

4. **Rationale:** This course is listed in CUNYfirst but is not in the graduate bulletin. This proposal corrects this error.

# **DEPARTMENT OF BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change Course not listed in the graduate bulletin

### 2. **From**:

Department(s)	Biological Sciences
Career	[ ] Undergraduate [ ] Graduate
Academic	[ ] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	Course not listed in the graduate bulletin
& Number	
Course Title	
Description	
Pre/ Co	
Requisites	
Credits	
Hours	
Liberal Arts	[ ]Yes [ ]No
Course	
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	Nico Acceptable
General	Not Applicable
Education	Required English Composition
Component	Mathematics
	Science
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

### 3. **To:**

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 79302
Course Title	Seminar in Special Topics
Description	Seminar in biological sciences exploring special topics
Pre/ Co Requisites	NA
Credits	<u>2</u>
Hours	<u>2</u>
Liberal Arts	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X_ Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

4. **Rationale:** This course is listed in CUNYfirst but is not in the graduate bulletin. This proposal corrects this error.

# **DEPARTMENT OFBIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change: Change in course credits, prerequisite

## 2. **From**:

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Level	
Subject Area	Biology
Course Prefix	BIO 7921
& Number	
Course Title	Tutorial
Description	NONE
Pre/ Co	Graduate Adviser's permission.
Requisites	
Credits	4
Hours	4
Liberal Arts	[X] Yes [ ] No
Course	NA
Attribute (e.g.	
Writing	
Intensive,	
WAC, etc)	V NI (A P II
General	X_ Not Applicable
Education	Required
Component	English Composition  Mathematics
	Science
	Flexible
	World Cultures
	US Experience in its Diversity
	Creative Expression
	Individual and Society
	Scientific World

#### 3. **To**:

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 7921
Course Title	Tutorial
Description	A study performed under the supervision of a member of the graduate faculty in Biological Sciences intended to involve the student in the performance of a carefully supervised project.
Pre/ Co Requisites	Departmental Permission Required.
Credits	2 (may be repeated for a maximum 4 credits)
Hours	<u>2</u>
Liberal Arts	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General Education Component	X_ Not Applicable Required English Composition Mathematics Science Flexible World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

#### 4. Rationale:

Often times a student is engaged in research for this tutorial and cannot complete the work and write up in one semester. In addition, sometime a student has taken all of the graduate courses offered in a given semester and needs to compete one or two credits for the degree. The tutorial, under the guidance of a faculty member, can provide a solution for the student while also giving the student additional graduate experience. Currently, if the student had already taken tutorial once, they cannot repeat it again. Adding approval of the graduate advisor as a prerequisite will address this problem. This course is listed in CUNYfirst but the description is not in the graduate bulletin.

#### **DEPARTMENT OF\_BIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change: Withdrawal of courses

2. **Description**: BIO 792 Tutorial (4 credits)

- 3. **Rationale:** The course has a duplicate in the online catalog. BIO 792 is the same as Bio 7922.
- 4. Date of departmental approval: 3/14/18

### **DEPARTMENT OFBIOLOGICAL SCIENCES**

#### **CURRICULUM CHANGE**

1. Type of Change: Withdrawal of courses

2. **Description**: BIO 79201 Advanced Study (2 credits)

- 3. **Rationale:** The course has a duplicate in the online catalog. BIO 79201 is the same as BIO 7921.
- 4. Date of departmental approval: 3/14/18

# **DEPARTMENT OFBIOLOGICAL SCIENCES**

# **CURRICULUM CHANGE**

1. Type of change: New Course

2.

Department(s)	Biological Sciences
Career	[ ] Undergraduate [X] Graduate
Academic Level	[X] Regular [ ] Compensatory [ ] Developmental [ ] Remedial
Subject Area	Biology
Course Prefix & Number	BIO 615
Course Title	Medical Microbiology
Description	Study of disease mechanisms, involving bacteria, viruses, fungi, and parasites. A case-based approach focused on common clinical symptoms, diagnostic laboratory tests, and treatment options.
Pre/ Co Requisites	BIO 331 and Permission of the Graduate Advisor.
Credits	4
Hours	6
Liberal Arts	[X] Yes [ ] No
Course Attribute (e.g. Writing Intensive, WAC, etc)	NA
General	X_ Not Applicable
Education Component	Required English Composition Mathematics Science
	Flexible
	World Cultures US Experience in its Diversity Creative Expression Individual and Society Scientific World

3. <u>Rationale</u>: The course is designed for graduate students that require advanced knowledge of medical biology for health professional schools. The course uses a case-based approach that is currently adopted by medical schools across the country to prepare students for assessing a patient, forming a differential list, initiating a preliminary diagnosis, running testing to confirm the diagnosis, and determining an appropriate treatment based on that diagnosis. The course can provide Lehman students with a "head start" with this procedure before going to health professional schools. The group case aspect of the course also provides students with an opportunity to improve their communication skills, learn professionalism, and collaborative work, which are vital skills for any health profession.

### 4. Learning Outcomes (By the end of the course students will be expected to):

- Develop familiarity with the major types of pathogenic microorganisms and the diseases that they produce in humans.
- Demonstrate knowledge of clinical manifestations in the history and physical examination that point to infection.
- Demonstrate the ability to use the laboratory to diagnose infections, including appropriate specimen collection
- Demonstrate the ability to interpret laboratory findings in the context of the patient's presentation and findings.
- Demonstrate knowledge of general categories of therapeutic modalities available to treat infections.
- Demonstrate problem solving ability and diagnostic reasoning with infectious diseases.
- 5. Date of Departmental Approval: 02/19/14