

MEMORANDUM TO: Ogden College of Science and Engineering Curriculum Committee

Dr. Melanie Autin
Dr. Nahid Gani
Dr. Scott Grubbs
Dr. Ting-Hui Lee
Dr. Andy Mienaltowski

Dr. Les Pesterfield
Dr. Todd Willian
Mr. Jason Wilson
Dr. Bangbo Yan

FROM: Dr. Stuart Burris, Chair

SUBJECT: Agenda for Thursday, February 1, 2024

A. OLD BUSINESS:

I. Consideration of the minutes of the December 2023 meeting.

B. NEW BUSINESS:

Type of item	Description of Item & Contact Information
Informational Proposals not attached.	<p><u>The following items were sent through the expedited process:</u> Add or Revise Course Student Learning Outcomes & Content Outlines AGEC 160, 261, 360, 361, 362, 366, 463, 468, 471, 475 AGRI 101, 108 ANSC 336 AS 180, 378 BIOL 326, 327, 328, 330, 331, 332, 334, 335, 337, 348, 350, 355, 356, 369, 377, 382, 388, 397, 399, 403, 404, 407, 411, 412, 420, 440, 450, 456, 457, 458, 459, 464, 470, 475, 477, 485, 489, 490, 495, 496 CHEM 101, 105, 106, 109, 111, 116, 120, 121, 489 CIT 330, 350, 412, 416, 418, 434, 436, 476, 478, 482, 486, 490, 492, 494 CS 425, 446 DATA 301 GEOG 489 HORT 209, 301, 302, 304, 305, 309, 312, 316, 317, 330, 340, 403, 404, 407, 408, 419, 420, 475 MATH 105, 109E, 118, 119, 137, 415, 417, 435 ME 321, 494, 495, 496, 497 MFGE 303</p> <p>Suspend/Delete AMS 102, 372 BIOL 400 CIT 452, 454, 456, 458, 472, 474, 496 MATH 142 ME 366, 416, 498, 499</p>

Action	Proposal to Revise a Course BIOL 497: Aquatic Field Ecology Contact: Scott Grubbs, scott.grubbs@wku.edu , x3696
--------	--

C. OTHER BUSINESS

Minutes – OCSE Curriculum Committee

December 2023

Members Present:

Meeting held via email

FROM: Dr. Stuart Burris, Chair

The meeting commenced via email on December 4, 2023 at 11:25am.

NEW BUSINESS:

Action Agenda:

GEOG 295: Autin/Pesterfield; approved

Ref. 623, Chemistry Major: Autin/Pesterfield; approved

Other Business:

None

Voting poll closed December 7, 2023 at 2:00pm

Minutes – OCSE Curriculum Committee

January 2024

Members Present:

N/A

FROM: Dr. Stuart Burris, Chair

There were no submissions by the January meeting deadline, so there was no January meeting.

Course Change Request

Date Submitted: 11/13/23 5:25 pm

Viewing: **BIOL 497 : Aquatic Field Ecology**

Last revision: 11/13/23 5:25 pm

Changes proposed by: sct16030

Catalog Pages
referencing this
course

[Biology_\(BIOL\)](#)

[Department of Biology](#)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Scott Grubbs	scott.grubbs@wku.edu	270-745-3696

Review Type [Full Review](#)

Term for
implementation Spring 2025

Academic Level Undergraduate

Course prefix
(subject area) BIOL - Biology

Course number 497

Department Biology

In Workflow

1. **BIOL Approval**
2. **SC Dean**
3. **SC Curriculum
Committee**
4. Professional
Education Council
5. Undergraduate
Curriculum
Committee
6. University Senate
7. Provost
8. Course Inventory

Approval Path

1. 01/22/24 3:56 pm
Michael Smith
(michael.smith1):
Approved for BIOL
Approval
2. 01/29/24 1:49 pm
Stuart Burris
(stuart.burris):
Approved for SC
Dean

College Science and Engineering

Course title
Aquatic Field Ecology

Abbreviated course title AQUATIC FIELD ECOLOGY

Course description

An integrated study of aquatic ecosystem structure and function, including the physical and chemical properties of water and application of biological field methods. This course requires off-campus **and overnight** travel.

Credit hours 0-4

Repeatable

Yes

Number of repeats 2

For maximum credits 4

Default grade type Standard Letter Alternate grade type(s)
NG-No Grade

Is this course intended to span more than one term?

No

Schedule type

Lab

Lecture

CIP Code 260101 - Biology/Biological Sciences, General.

Does this course have prerequisites

Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
	(
	(	BIOL 222	D	UG		No
And		BIOL 223	D	UG	)	No
Or	(	BIOL 224	D	UG		No
And		BIOL 225	D	UG	)	No
Or	(	BIOL 226	D	UG		No

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
And		BIOL 227	D	UG	)	No
)	
And		CHEM 120	D	UG		No
And		CHEM 121	D	UG		No

Corequisites

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? Yes

Select:

Exclude

Classification:

Classification restriction
Freshman
Sophomore
<u>Freshman</u>
<u>Sophomore</u>

Departmental Restrictions

Reason for changing the course

Additions of Student Learning Outcomes and Course Outline. In addition, the statement regarding overnight travel was removed.

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

No impact

Is this course part of a program that leads to teacher certificate? Yes

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
<u>1</u>	<u>List and define several important physical and chemical properties of water.</u>
<u>2</u>	<u>Breakdown and differentiate the hierarchical organization of watersheds and riverine systems into valleys and reaches.</u>
<u>3</u>	<u>Classify lotic systems by stream order.</u>
<u>4</u>	<u>Define and differentiate several channel units of streams and rivers.</u>
<u>5</u>	<u>Compute stream flow (= discharge) and quantify the relationship with channel retention.</u>
<u>6</u>	<u>Classify and contrast tree leaves according to processing rates and calculate the coefficient of mass loss.</u>
<u>7</u>	<u>Classify and differentiate stream macroinvertebrates according to functional feeding groups.</u>
<u>8</u>	<u>Categorize macrobiological riverine communities according to stream size, depth, and streamside riparian characteristics.</u>
<u>9</u>	<u>List and differentiate several origins of natural lakes.</u>
<u>10</u>	<u>Explain and summarize how lake water mixes throughout a season.</u>
<u>11</u>	<u>Explain how carbon and oxygen patterns in lakes change over time and with depth.</u>
<u>12</u>	<u>List and differentiate primary and secondary productivity patterns in lakes and riverine systems.</u>
<u>13</u>	<u>Generalize on controversial aquatic ecology topics (e.g., microplastics pollution, mussel extinction, surface coal mining) and justify and defend opinions openly with classmates in discussion boards.</u>

Content outline

#	Topic
<u>1</u>	<u>Properties of Water</u> <u>Watersheds and Riverscapes</u>

#	Topic
	<u>Valleys</u> <u>Reaches</u> <u>Hydrology</u> <u>Channels</u> <u>Riparian Zones</u> <u>Freshwater Macroinvertebrates</u> <u>River Continuum Concept</u> <u>Origins of Lakes</u> <u>Heat and Mixing</u> <u>Carbon and Oxygen</u> <u>Primary Productivity</u> <u>Secondary Productivity</u>

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments