BIOS 125: FUNDAMENTALS OF FRESHWATER

In Workflow

1. CNHS Dean (otu@uwp.edu)
2. Registrar Review (hollandr@uwp.edu)
3. Gened Committee Chair
4. CCC Chair (gillogly@uwp.edu)
5. Registrar's Office (turnerl@uwp.edu; lemens@uwp.edu; hollandr@uwp.edu)
6. PeopleSoft

New Course Proposal

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Changes proposed by: David Rogers (rogersd)

Subject Code

BIOS - Biological Sciences

Course Number

125

Department

DEPT - Biological Sciences

College

College of Natural & Health Sciences

Effective Term

Spring 2023

Academic Career

Undergraduate

Grading Basis

Graded

Will this be used in a program?

Yes

Is this or will this course be used in a program?

CIM Program Pick List	Course Usage
Environmental Studies	Elective

Credits

3

Long Title

Fundamentals of Freshwater

Short Title

Fundamentals of Freshwater

Course Description

Describes the most important natural resource on Earth: freshwater, through an exploration of past, present, and future dimensions of water use and misuse, protection and waste, security and scarcity. This course will cover the essential physical, chemical, and biological aspects of water in the context of socially relevant topics required to understand contemporary economic, political, and environmental water issues with a local, national, and international scope. Three-hour lecture.

Prerequisites

None

Does this course require instructor consent (i.e. permission numbers)?
No

Does this course require department consent (e.g. approval)?
No

Are there any fees associated with this course?
No

Course Learning Outcomes

	Course Learning Outcomes
1	Understand the complexities of life in water, the interactions with the physical surroundings and the ecological relationships between organisms and their environment
2	Understand the nexus between biological, ecological, physical, climate and economic systems as they relate to water
3	Understand the basics of hydrologic cycle and the processes and interactions among atmospheric, surface and ground water components and the issues and processes related to the quality of these waters
4	Understand the origin and application of environmental laws, regulatory and management frameworks; and the economics of water resource use and allocation

Course Typically Offered:
Spring

Method of Instruction
Traditional (In person).

Components

Components	Default Section Size	Is Primary
Lecture	24	No

Does course count as a retake of a previous UWP course?
No

Was this course previously offered as a special topic?
No

Is course repeatable for credit?
No

General Education Course?
Yes

Purpose of Request
New designation

General education course designation request

General Education
Natural Science: BIOS
Natural Science: ENVS

General education courses must address at least one learning outcome in each of these categories: Communication, Reasoned Judgement and Personal and Social responsibility.

Please select one Communication Learning Goal
Literacy

Please select one Reasoned Judgement Learning Goal
Critical Thinking

Please select one Social and Personal Responsibility Learning Goal
Individual accountability

Literacy

Reading

How many pages of reading are students required to complete on average each week?

40

List course activities that provide students with feedback on their reading comprehension.

Exam questions will assess terms and ideas presented in the texts, readings, and lecture materials. Reading quizzes will explicitly assess vocabulary and knowledge presented in the assigned readings. Written assignments will assess application of information and terminology generated from the readings to evaluating and interpreting new sources and ideas.

Writing (required for 200 level)

List writing assignments and minimum page count for each assignment

Assignment	Page Count
None	1

In addition to syntax and mechanics, which two additional areas will you focus on in this course:

Consistancy of organization and presentation

List course activities that provide students feedback on their writing.

Activity
None

Critical Thinking

Identify specific assignments within the course and how these assignments address the skills required for your specific course level (100 or 200)

Written assignments will explicitly evaluate the student's ability to correctly assess and summarize a relevant water issue, including the quantity and quality of evidence presented in support a position on the issue. Students will write short responses to discussion prompts that demonstrate their critical thinking on water related topics that will require them to form their own conclusion based on their understanding of the concepts and ideas presented in lectures, the texts, and supplemental readings

Individual accountability

Indicate which area within Responsible Choice will be covered within the course?

Identifies opportunities to expand knowledge, skills, and abilities as part of completing required work.

Please indicate which other areas with Discipline and Experience and/or Reflection and Self-assessment will be covered within the course?

Applies previous knowledge and skills to demonstrate comprehension and performance in novel situations.

Please state how and which course assignments will address these skills.

See Syllabus

Diversity Course?

No

Community-Based Learning Course?

No

Rationale for Approval

Justification

This course provides an accessible entry into natural science, biological science, and freshwater science for non-science majors as well as students seeking a minor or certificate in Freshwater Resources within the Environmental Studies program. This course also diversifies the non-majors offerings within the Biological Sciences Department by emphasizing the unique connection our species has with water across multiple levels of biological organization from the scale of cells to ecosystems while integrating elements of

social justice, public health, and scientific literacy. This course serves as a pre-requisite for freshwater courses offered as part of collaborative degree programs through the Freshwater Collaborative of Wisconsin, a UW-System-wide initiative that strives to meet the economic, social, and ecological needs of the state, region, and country through innovative teaching. The course will emphasize the scientific process through real-world applications and active learning opportunities to engage and retain non-science majors and prepare and equip science majors and minors specializing in freshwater.

Does this course duplicate offerings in another program or is this course part of another program's degree requirements?

No

Attach course syllabus

BIOS 125 Syllabus.pdf

By submitting this form, I am confirming that the proposed changes have the support of the department or program committee.

Key: 4754