

Syllabus BIOL 4105

Lab

Fall 2026

Aquatic Biology Laboratory
BIOL 4105 - 001 Fall 2026
Mondays 2:00 - 4:50 pm

Professor:

Marsha Williams, HPR 107 or BEP 129, Phone: 315.442.2222

Office Hours: MWF 9-10am, or by appointment

Graduate Teaching Assistant:

Anna Gann, Graduate TA, BEP 118, **Email:** agann@state.ny.us

Office hours: Thursday 10am-1pm, or by appointment

Catalog Description: Diversity, ecology, and evolution of aquatic organisms, with an emphasis on North American species. Field and laboratory exercises.

<https://ebookcentral.proquest.com/lib/uttyler/>

*CHECK THE IDs WITH THE MASTER LIST. IDs that are not reflected in the field guide. The guide is available at the following link:
2) Voshell, R. 2002. A guide to common freshwater invertebrates of North America. 2nd edition. Oxford and Woodward Publishing Company.

Evaluation:

Students will be evaluated based on the following:

1. Participation 20%. This will include attendance and participation.
2. Lab practicals (2) 20% each. Exams will focus on identifying organisms.
3. Project and presentation 20%. Students will investigate the ecological health of a local Tyler stream using the field guide. Each group will then present their research to the class. The presentation will include an introduction, study site descriptions, methods, results, and an overall ecological health of their study stream. The presentation will be a scientific conference (15 minutes total; about 10 minutes for the presentation and 5 minutes for questions).

Field Trips: As this is a field-based course, a field trip is required. We will make every attempt to return to campus in the event of (and unforeseen circumstances) may necessitate alternative arrangements ahead of time in case we run late on a field trip. Students should plan to bring water and snacks on field trips. Etc.

Academic Misconduct: Submitting plagiarized work, the representation of another's work or ideas as your own, the use of another person's ideas; and/or the falsification of research results shall be grounds for charges of academic misconduct will be reported to the appropriate authorities in automatic failure of the course.

Artificial Intelligence (AI) Statement:

(Written by Dr. Bill and based on a policy from the American Psychological Association (APA). Retrieved from <https://beta.openai.com/>)

diverse range of examples, the AI system may produce different outputs for similar inputs, which may lead to discrimination.

iii. Lack of transparency: Some AI systems are complex and difficult to interpret, making it challenging to detect and address discrimination.

iv. Lack of accountability: Without proper oversight and governance, it is difficult to identify and address discrimination.

v. It is important to keep in mind that these biases are often subtle and hard to detect, but they can have serious consequences. Addressed.

B. AI can be a valuable tool for augmenting human capabilities, but it is not a replacement.

C. AI is a tool, just like a pencil or a computer. We should acknowledge using it. Pay close attention to the output and the work that is produced from AI and explain how it was generated. Basic attribution rules still apply. Cite everything.

i. I would suggest using your prompt as the basis for your work.

citations using AI.

F. Use your best judgement to determine if/w always make products easier and/or better. Your tools are not designed to work with the scientific popular works and older works that are open may be worse than what you can do yourself. Large language models and chatbots are ""lo (yet). For example, ChatGPT-3 uses data from

Aug 24th	Introduction; Taxonomy-Mac
Aug 31st	Freshwater Mussel Lecture
Sep 7th	<i>LABOR DAY, NO LAB YAY!</i>
Sep 14th	<i>Local field trip - Quail Creek</i>
Sep 21st	<i>Local field trip - Dr. Greenwo</i>
Sep 28th	Taxonomy - identify organisms

