BIOLOGY 5337 – ADVANCED LIMNOLOGY Lecture TR 12:30-13:45, BSB D.105

Instructor

Stephen Powers, Ph.D. Office hours: by appointment

BSB C.417 Office: 254-710-2140 <u>s powers@baylor.edu</u> Mobile: 925-699-7596

Course Description: The interdisciplinary study of inland waters. Emphasis on analysis and interpretation of physical, chemical, biological factors in aquatic ecosystems.

Goals: This course brings limnology through lecture, class discussion, reading, data analysis, writing, and field and laboratory activities. The main goal is that each person continues to grow as a scientist by learning and applying aspects of physics, chemistry, and biology as they relate to inland water bodies. Assignments are designed to practice critical thinking, interpretation of scientific literature, data analysis, and scenarios thinking in the context of place-based change.

Required Text and Readings:

Limnology: Inland Water Ecosystems, 2016, Jacob Kalff.

As pdf (free) https://livresbioapp.files.wordpress.com/2016/03/limnology-kalff.pdf

Kindle or hardcover (for purchase)

 $\frac{\text{https://www.amazon.com/Limnology-Inland-Ecosystems-Jacob-Kalff-ebook/dp/B01GFEPZT0/r}{\text{ef=sr_1_1?s=books\&ie=UTF8\&qid=1501179782\&sr=1-1\&keywords=limnology+kalff+and+downing}}$

This course is a Canvas-free zone. We will use Github instead.

Writing Assignment: A Mini Report in the format of a short scientific manuscript will be due at the end of the semester. Grading: Course grades are based on two take-home Problem Sets (40%), Attendance and Participation (20%), Exercises in Data presented individually or in pairs (10%), and a Mini Report due at the end of the semester (30%).

<u>Attendance</u>: The Baylor attendance policy will be enforced. But when research priorities and class priorities conflict, choose research.

Academic integrity

You are encouraged to become familiar with the University's Policy of Academic dishonesty found in the Student Handbook. The content of the Handbook applies to this course. Academic dishonesty is grounds for removal from the course and receiving a grade of "F."

Baylor University Title IX

Sexual and Gender-Based Harassment and Interpersonal Violence Policy

Baylor University does not discriminate on the basis of sex or gender in any of its education or employment programs and activities, and it does not tolerate discrimination or harassment on the basis of sex or gender. This policy prohibits sexual and gender-based harassment, sexual assault, sexual exploitation, stalking, intimate partner violence, and retaliation (collectively referred to as prohibited conduct).