

Biological Assessment of Water Quality (WATR 482/682), Fall 2019

Lecture: T/R 9:00-9:50 am, TNR 359 **Lab:** R 1:00-2:50 pm TNR 252
Instructor: Dr. Jered Studinski **Email:** jered.studinski@uwsp.edu
Office: TNR 184 **Phone:** (715) 346-2832
Office Hours: TBA

Description: Assessment and effects of physical and chemical pollution in the aquatic environment. Project oriented application of laboratory assays and field assessments and their interpretation using bacteria, invertebrates, aquatic plants and fish.

Learning outcomes: After completing this course, students will understand 1) the local and global threats to water quality, 2) the theory and application of water monitoring strategies, and 3) the application and interpretation of common water monitoring methods.

Required Course Materials: Via textbook rental - "Applied Ecosystem Concepts" by Gerald Mackie.

Grading: Lecture exams 1, 2, and 3: 50 points each (150 points total)
Assignments, activities, quizzes, and a final project: ~150 points total

Letter grades: Grades are rounded to the nearest whole percent. For example, an 89.51% = A-, while an 89.49% = B+.

100-92% = A	89-88% = B+	79-78% = C+	69-68% = D+	59-0% = F
91-90% = A-	87-82% = B	77-72% = C	67-62% = D	
	81-80% = B-	71-70% = C-	61-60% = D-	

Attendance policy: Attendance is expected, and you will not do well if you miss class. Missed lectures and labs will translate into missed points on quizzes, exams, assignments, and activities. If you must be absent, please tell me why *before* the absence, unless it is an emergency. Only with an excused absence (e.g. death of a family member, serious illness, hospitalization) will I allow you to make up or nullify any missed quizzes, exams, activities, etc.

Tentative schedule: Note that assignments, activities, and quizzes are not shown, but will occur throughout the semester. Lab time will contain activities that support the weekly lecture topics and will also be used to work on your final project.

Week	Dates	Topics
1	3-Sep 5-Sep	Course intro, review of physicochemical characteristics of water
2	10-Sep 12-Sep	Review of the biological communities and ecology of water
3	17-Sep 19-Sep	Local and global motivations and use of aquatic systems
4	24-Sep 26-Sep	Local and global motivations and use of aquatic systems
5	1-Oct 3-Oct	Pollutants and their impacts
6	8-Oct 10-Oct	Exam 1 (Tuesday) , Theory and objectives of water quality monitoring
7	15-Oct 17-Oct	Water quality data analysis and interpretation
8	22-Oct 24-Oct	Monitoring considerations in lentic, lotic, and groundwater systems
9	29-Oct 31-Oct	Selection of water quality parameters
10	5-Nov 7-Nov	Selection of water quality parameters, Exam 2 (Thursday)
11	12-Nov 14-Nov	Development and application physicochemical metrics and indices
12	19-Nov 21-Nov	Development and application of biological metrics and indices
13	26-Nov 28-Nov	Policy frameworks, Thursday no class (Thanksgiving)
14	3-Dec 5-Dec	Water quality data analysis and interpretation
15	10-Dec 12-Dec	Citizen monitoring, emerging issues, student presentations
16	17 Dec (Tues.)	Exam 3 (Final exam) 10:15 am - 12:15 pm TNR 359

Electronic devices: Do not use them in class. Be considerate, or you will be asked to leave. Taking notes on tablets and laptops is discouraged as research suggests it harms the course performance of you and those around you. However, if you must take notes electronically, please sit in the back of the classroom.

Graduate students: Grades for the course follow the above guidelines. In addition, a 40-minute seminar on a selected and approved topic will be required. The seminar will be worth 50 points.

Care Team

The University of Wisconsin-Stevens Point is committed to the safety and success of all students. The Office of the Dean of Students supports the campus community by reaching out and providing resources in areas where a student may be struggling or experiencing barriers to their success. Faculty and staff are asked to be proactive, supportive, and involved in facilitating the success of our students through early detection, reporting, and intervention. As your instructor, I may contact the Office of the Dean of Students if I sense you need additional support which individually I may not be able to provide. You may also share a concern if you or another member of our campus community needs support, is distressed, or exhibits concerning behavior that is interfering with the academic or personal success or the safety of others, by reporting here: <https://www.uwsp.edu/dos/Pages/Anonymous-Report.aspx>.

Title IX

UW-Stevens Point is committed to fostering a safe, productive learning environment. Title IX and institutional policy prohibit discrimination based on sex, which includes harassment, domestic and dating violence, sexual assault, and stalking. If you choose to disclose information about having survived sexual violence, including harassment, rape, sexual assault, dating violence, domestic violence, or stalking, and specify that this violence occurred while a student at UWSP, federal and state laws mandate that I, as your instructor, notify the Title IX Coordinator/Office of the Dean of Students.

Please see the information on the Dean of Students webpage for information on making confidential reports of misconduct or interpersonal violence, as well as campus and community resources available to students.

Dean of Students: <https://www.uwsp.edu/DOS/sexualassault/Pages/default.aspx>

Title IX page: <https://www.uwsp.edu/hr/Pages/Affirmative%20Action/Title-IX.aspx>

Disability and Accommodations

In accordance with federal law and UW System policies, UWSP strives to make all learning experiences as accessible as possible. If you need accommodations for a disability (including mental health, chronic or temporary medical conditions), please visit with the Disability and Assistive Technology Center to determine reasonable accommodations and notify faculty. After notification, please discuss your accommodations with me so that they may be implemented in a timely fashion.

DATC contact info: datctr@uwsp.edu; 715/346-3365; 609 Albertson Hall, 900 Reserve Street

FERPA

The Family Educational Rights and Privacy Act (FERPA) provides students with a right to protect, review, and correct their student records. Staff of the university with a clear *educational need to know* may also have to access to certain student records. Exceptions to the law include parental notification in cases of alcohol or drug use, and in case of a health or safety concern. FERPA also permits a school to disclose personally identifiable information from a student's education records, without consent, to another school in which the student seeks or intends to enroll.

Academic Integrity

Academic Integrity is an expectation of each UW-Stevens Point student. Campus community members are responsible for fostering and upholding an environment in which student learning is fair, just, and honest. Through your studies as a student, it is essential to exhibit the highest level of personal honesty and respect for the intellectual property of others. Academic misconduct is unacceptable. It compromises and disrespects the integrity of our university and those who study here. To maintain academic integrity, a student must only claim work which is the authentic work solely of their own, providing correct citations and credit to others as needed. Cheating, fabrication, plagiarism, unauthorized collaboration, and/or helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. Failure to understand what constitutes academic misconduct does not exempt responsibility from engaging in it. For more information on UWS chapter 14 visit: <https://www.uwsp.edu/dos/Pages/Student-Conduct.aspx>

Reporting Incidents of Bias/Hate

It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally, or for other students or student groups.

If you have experienced a bias incident (an act of conduct, speech, or expression to which a bias motive is evident as a contributing factor regardless of whether the act is criminal) at UWSP, you have the right to report it: <https://www.uwsp.edu/dos/Pages/Anonymous-Report.aspx>. You may also contact the Office of the Dean of Students directly at dos@uwsp.edu. Diversity and College Access is available for resources and support of all students: <https://www.uwsp.edu/dca>.

Clery Act

The US Department of Education requires universities to disclose and publish campus crime statistics, security information, and fire safety information annually. Statistics for the three previous calendar years and policy statements are released on or before October 1st in our Annual Security Report. Another requirement of the Clery Act is that the campus community must be given timely warnings of ongoing safety threats and immediate/emergency notifications. For more information about when and how these notices will be sent out, please see our Jeanne Clery Act page at <https://www.uwsp.edu/dos/clery>.

The Drug Free Schools and Communities Act (DFSCA) requires institutions of higher education to establish policies that address unlawful possession, use, or distribution of alcohol and illicit drugs. The DFSCA also requires the establishment of a drug and alcohol prevention program. The Center for Prevention lists information about alcohol and drugs, their effects, and the legal consequences if found in possession of these substances. Center for Prevention – DFSCA: <https://www.uwsp.edu/dos/aoda-ipv/Pages/dfsca.aspx>

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act. Each year students violate these laws and campus policies, putting themselves at risk of federal prosecution. For more information about what to expect if you are caught, or to take preventive measures to keep your computing device clean, visit our copyright page at <http://libraryguides.uwsp.edu/copyright>.