

# Aquatic Insects (WATR 488/688), Fall 2021

**Lecture:** TNR 352, T/Th 10:00-10:50 am

**Instructor:** Dr. Jered Studinski

**Office:** TNR 184

**Office Hours:** M 10-11 am, T/Th 9-10 am, W 9-11 am

**Lab:** TNR 351 Section 1: T 2:00-3:50 pm

Section 2: T 4:00-5:50 pm

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**Description:** Life histories, ecology, behavior, taxonomy, and identification of lotic and lentic aquatic insects. Field collections of aquatic insects and discussions of habitat preferences and water quality influences.

**Learning outcomes:** After completing this course, students will be able to: 1) identify all aquatic insect orders without the use of a taxonomic key and common families of Wisconsin using a dichotomous key, 2) describe the collection methods and collect aquatic insects from major habitat types, 3) describe the general ecology, behavior, food habits, life cycles, and water quality factors affecting the distribution of aquatic insect groups, and 4) construct a scientific collection of aquatic insects.

**Required Course Materials:** "Guide to Aquatic Invertebrates of the Upper Midwest" by R. W. Bouchard Jr. (text rental).

**Recommended Course Materials:** Waders, rubber boots, and a collecting buddy.

**Grading:** Lecture exams 1, 2, and 3: 280 points total

Lab practicals 1 and 2: 100 points total

Aquatic insect collection: 150 points

**Letter grades:** Grades are rounded to the nearest 1%. 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-	

**Topics covered:** This course covers the taxonomy, identification, evolution, ecology, and resource management implications of the common orders and families of aquatic insects, with some coverage of other important invertebrate groups.

**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.

**Graduate students:** Grades for the course follow the above guidelines. In addition, either a seminar on a selected and approved topic or a collection focusing on specific habitat or taxonomic group will be required. Please discuss these options with your instructor early in the semester. The additional requirements will be worth 40 points.

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

## Tentative schedule:

Week	Date	Tues. Lecture	Date	Tues. Lab (2-4 pm or 4-6 pm, incl. practicals)	Date	Thurs. Lecture
1					2-Sep	Intro to the course, collection
2	7-Sep	Lec. 1 Non-insect aquatic invertebrates	7-Sep	Collect insects, identify insects	9-Sep	Lec. 2 Class Insecta overview
3	14-Sep	Lec. 2 Class Insecta overview	14-Sep	Collect insects, identify insects	16-Sep	Lec. 3 Orders of Insecta
4	21-Sep	Lec. 3 Orders of Insecta	21-Sep	Collection field trip	23-Sep	Flex time, review
5	28-Sep	<b>Lec. exam 1, all previous material, 80 pts</b>	28-Sep	Collect insects, identify insects	30-Sep	Lec. 4 Ephemeroptera
6	5-Oct	Lec. 4 Ephemeroptera	5-Oct	Collection field trip	7-Oct	Lec. 5 Odonata
7	12-Oct	Lec. 6 Plecoptera	12-Oct	Collect insects, identify insects	14-Oct	Lec. 7 Hemiptera
8	19-Oct	Lec. 7 Hemiptera	19-Oct	Review for practical, identify insects	21-Oct	Lec. 8 Coleoptera
9	26-Oct	Lec. 8 Coleoptera	26-Oct	<b>Lab practical 1, through Hemiptera, 50 pts</b>	28-Oct	Flex time, review
10	2-Nov	<b>Lec. exam 2, Ephem.-Coleop., 100 pts</b>	2-Nov	Collect insects, identify insects	4-Nov	Lec. 9 Mega./Neur./Lepid.
11	9-Nov	Lec. 10 Trichoptera	9-Nov	Collect insects, identify insects	11-Nov	Lec. 10 Trichoptera
12	16-Nov	Lec. 11 Diptera	16-Nov	Collect insects, identify insects	18-Nov	Lec. 11 Diptera
13	23-Nov	Lec. 12 Bioassessment	23-Nov	Collect insects, identify insects	25-Nov	<b>No class (Thanksgiving)</b>
14	30-Nov	Lec. 12 Bioassessment	30-Nov	<b>Collection due at the end of the lab, 150 pts</b>	2-Dec	Lec. 13 Drift and colonization
15	7-Dec	Lec. 14 Spatial and temporal ecology	7-Dec	<b>Lab practical 2, Coleoptera-Diptera, 50 pts</b>	9-Dec	Flex time, review
16	15-Dec (Wednesday)	<b>Lec. Exam 3 (final exam), 12:30-2:30 pm, Trichoptera-end, 100 pts</b>				

**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](mailto: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](mailto: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 1<sup>st</sup> 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/dfsc.aspx>

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**Online teaching:** Lecture materials and recordings for this course are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.