Aquatic Insects (WATR 488/688)

Lecture: TNR 352, T/Th 10:00-10:50 am **Lab:** TNR 351 Section 1: T 2:00-3:50 pm Section 2: T 4:00-5:50 pm

Instructor: Dr. Jered Studinski

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Office Hours: M/T/Th 9-10 am Email: jered.studinski@uwsp.edu

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 partner.

Grading: Lecture exams 1, 2, and 3: 220 points total (49%)

Lab practicals 1 and 2: 80 points total (18%) Aquatic insect collection: 150 points (33%)

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 with be worth 40 points.

Electronic devices: Put your phone away and talk to people around you. Pay attention to the lecture, take good notes, and ask questions. Be an active participant in your education. Taking notes on tablets and laptops is discouraged as research suggests it harms your course performance and the performance of those around you. However, if you must take notes electronically, please sit at the edges or back of the classroom.

Tentative schedule:

Week	Date Tues. Lecture	Date Tues. Lab (2-4 pm or 4-6 pm, incl. practicals)	Date Thurs. Lecture
1	5-Sep Intro to the course, collection	5-Sep No lab	7-Sep Lec. 1 Non-insect aquatic invertebrates
2	12-Sep Lec. 2 Class Insecta overview	12-Sep Allocate lab supplies, identify insects	14-Sep Lec. 2 Class Insecta overview
3	19-Sep Lec. 3 Orders of Insecta	19-Sep Collect insects, identify insects	21-Sep Lec. 3 Orders of Insecta
4	26-Sep Flex time, review	26-Sep Collection field trip	28-Sep Lec. exam 1, all previous material, 60 pt
5	3-Oct Lec. 4 Ephemeroptera	3-Oct Collect insects, identify insects	5-Oct Lec. 4 Ephemeroptera
6	10-Oct Lec. 5 Odonata	10-Oct Collection field trip	12-Oct Lec. 6 Plecoptera
7	17-Oct Lec. 7 Hemiptera	17-Oct Collect insects, identify insects	19-Oct Lec. 7 Hemiptera
8	24-Oct Finish lectures, review	24-Oct Lab practical 1, through Hemiptera, 40 pts	26-Oct Lec. exam 2, EphemHemiptera., 80 pts
9	31-Oct Lec. 8 Coleoptera	31-Oct Collect insects, identify insects	2-Nov Lec. 8 Coleoptera
10	7-Nov Lec. 9 Mega./Neur./Lepid.	7-Nov Collect insects, identify insects	9-Nov Lec. 10 Trichoptera
11	14-Nov Lec. 10 Trichoptera	14-Nov Collect insects, identify insects	16-Nov Lec. 11 Diptera
12	21-Nov Lec. 11 Diptera	21-Nov Collect insects, identify insects	23-Nov No class (Thanksgiving)
13	28-Nov Lec. 12 Bioassessment	28-Nov Collect insects, identify insects	30-Nov Lec. 12 Bioassessment
14	5-Dec Lec. 13 Drift and colonization	5-Dec Collection due at the end of the lab, 150 pts	7-Dec Lec. 14 Spatial and temporal ecology
15	12-Dec Lec. 14 Spatial and temporal ecology	12-Dec Lab practical 2, Coleoptera-Diptera, 40 pts	14-Dec Finish lectures, review

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.

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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

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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.