

The Science of Fly Fishing for Trout

FW 112, 1 credit, Spring 2015

Instructor:

Brooke Penaluna

E-mail: Brooke.Penaluna@oregonstate.edu

Office: 278 FSL

Credit hours: This course will meet for one hour once a week for lecture during the term for 1 credit.

Co-Requisites: PAC 331 (pending approval of CPS proposal #92366), ENG 225 (pending approval of CPS proposal #92323)

Course Description

The Science of Fly Fishing for Trout is part of a “cross-linked” multi-disciplinary class that uses fly fishing as a window into the larger world of science, art, and conservation, and more specifically into the structure and function of freshwater ecosystems. This class is 1-credit where students also have to be concurrently registered for *The Literature of Fly Fishing for Trout* through English (also 1-credit) and *The Art of Fly Fishing for Trout* through Physical Activity Courses (also 1-credit). While learning the technical skills of fly fishing in streams, as well as study the literature of angling, students will also learn the principles of conservation biology and freshwater ecology. From a scientific perspective, aspects of general ecology, entomology, taxonomy, and watershed processes will be considered. In addition, students will learn practical skills for advocating on the behalf of imperiled rivers and biota by focusing on conservation and restoration. Students will also learn how to work as team member in groups.

Course materials:

Students will be expected to have a valid Oregon Sport fishing license.

Rods, reels, lines, and flies will be provided.

Materials needed for assignments will be provided via blackboard or in-class.

Learner Outcomes

Students in this class shall:

- Be able to integrate scientific concepts as they relate to river ecology and restoration (assessed during focus groups and exam questions)
- Demonstrate an understanding of fish and insect identification (assessed through skills tests)

Course Overview:

Week 1: Common sport fishes in Oregon; Regulations and management

Week 2: What is a watershed? space, time, location, and process

Week 3: Entomology

Week 4: Insect hatches

Week 5: Aquatic food webs and productivity

Week 6: Trout habitat

Week 7: Stream structure and function

Week 8: Links within a watershed: River Continuum, Network Dynamics, upslope

Week 9: Conservation and Restoration in Benton County

Week 10: Native vs. Invasive species

Grading

There are weekly quizzes or assignments (60%) and one final exam (40%). Quizzes and assignments will cover scientific topics and basic identification of fish and insects, which is a critical tool for students on their ways to becoming conservation-minded river guardians. The exam is cumulative. Attendance and participation will also affect your grade (see below).

Attendance

Regular attendance and participation are expected. If you have to miss class, I expect you to contact me about it before the absence. Missing class because you are out of town, have an interview, or have a non-emergency doctor's appointment is not considered excused. You are allowed one unexcused absence to use at your own discretion. Any absences beyond the first unexcused absence will result in the lowering of your grade one level (from an A to an A-, for example). Active and thoughtful participation in class along with good attendance will improve your grade (you can go from a B to a B+, for example).

New One: Statement Regarding Students with Disabilities:

Oregon State University is committed to student success; however, we do not require students to use accommodations nor will we provide them unless they are requested by the student. The student, as a legal adult, is responsible to request appropriate accommodations. The student must take the lead in applying to Disability Access Services (DAS) and submit requests for accommodations each term through DAS Online. OSU students apply to DAS and request accommodations at our [Getting Started with DAS](#) page.

Integrity Statement

Be advised that all the assignments, quizzes, and the final exam must have been written by you. While it is OK to ask for help from other people, every assignment should be written and created by you. You may use models, but it is not acceptable to copy full sentences. Assignments that are considered cheating or very similar to one another will automatically receive a zero. OSU [Statement of Expectations for Student Conduct](#)