## FW 401 Research

Instructor: Selected by student prior to enrolling Supervisor: Selected by student prior to enrolling

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**NOTE** to prospective students: This syllabus is intended to provide students who are considering taking this course an idea of expectations. Students will work closely with a supervisor to design the specifics of their experience and to outline expectations for assessment prior to enrollment.

# **Course Credits: (1-6 credits)**

Through the tasks required to perform independent research, each credit hour should involve a skilled, well-prepared student a minimum of 30 hours of focused academic effort per term. If a student is not organized and capable of quality independent work, considerably more hours could be necessary to meet expectations agreed upon by their supervisors.

# **Prerequisites:**

Departmental approval is required to register. Students should work with their supervisor, and the course contact above, to create a section of FW 401 unique to their plan for the term. Students must also complete the FW 401 Enrollment Form, which tracks enrolled students' research projects.

# **Course Description:**

This course aims to provide transcript recognition for high quality academic research endeavors. Research must be performed by the student during the term enrolled under guidance of a supervisor in the Department of Fisheries, Wildlife, and Conservation Sciences. The supervisor oversees all aspects of the research project including mentoring, safety training and submitting a grade for the student based on criteria agreed upon by the student and mentor. Activities performed for these credits may not count towards other courses.

#### **Course Content:**

By facilitating research mentorships, this course will expose enrolled students to the community of scholars in their chosen field and develop a culture of research at the undergraduate level. The primary goal is to provide students with outstanding research experiences, preparing them for future careers.

To accommodate various interests and opportunities, students and mentors develop a plan for activities and assessments to be completed within the term the student is enrolled. Activities and expectations should be appropriate to the amount of time required per credit hour and must be agreed upon before the term starts (1 credit hour = 30 hours per term or 3 hours per week). Deadlines, due dates, and grading criteria should be determined by the supervisor and clearly communicated prior to the term. Plan carefully to ensure that you fully understand the expectations of the research plan and can complete them during the enrolled term.

### **Credit Hour Guide:**

To accommodate a wide variety of projects, students may take up to 6 credits of FW 401 over multiple terms. For each term, a product must be submitted for assessment to the supervisor to assign a grade.

This guide is to aid student/supervisor pairs to help develop expectations and define the final assessment appropriate for the level of effort.

- 1-2 credit hours: (30-60 hours per term or 3-6 hours per week)
  - o Early research & Assistant projects are appropriate for this credit amount.
  - O Activities could focus on at least one aspect of the academic research process such as effective experimental design, development of a sampling strategy, performing a literature search, training in technical methods, grant writing, data analysis, etc. All projects must result in a product with a clear assessment method. This might be a data base, a review paper, a protocol, a grant application, report, or the figures, tables and results from data analysis.
- **3-6 credits:** (90-180 hours per term or 9-18 hours per week)
  - o Advanced & Independent research projects are appropriate for this credit amount.
  - O Activities should include an independent research project designed and conducted by the student with guidance and training from the supervisor. This includes developing and communicating a distinct research question with a competent hypothesis, a thorough literature search, data collection through field sampling and/or lab work, analysis using appropriate statistics, and presentation of findings through a written and/or oral assessment. If credits are divided over multiple terms, the product after one term should be fitting for the level of work completed at that time.

# **Learning Outcomes:**

Students taking this course will be able to:

- 1-2 credits: Employ critical thinking, develop skills required for independent research success, and explore and develop their understanding of research-based careers.
- **3+ Credits** (in addition to above): Apply the scientific method in order to expand or utilize skills and methods learned in previous studies.

By completing these assessable objectives:

- 1-2 credits: Synthesize and submit a product demonstrating proficiency in at least one primary area of research of the following: hypothesis development and sampling strategy design; method development; sample collection and data management; data analysis and result production; communication of results
- **3+ Credits:** Synthesize and submit a product demonstrating proficiency in more than one of the primary areas of research listed above.
- 6+ Credits in a single term: These students are expected to recall and communicate knowledge acquired, expand comprehension of topics researched, apply scientific method concepts to solve a scientific problem, analyze data to produce results and synthesize a product to demonstrate comprehension and conclusions.

## **Evaluation of Student performance:**

FW 401 will be graded on an A-F scale based on criteria agreed upon by the student and mentor. Your mentor will be responsible for setting all expectations for the research credits including assigning tasks, safety training, setting due dates, product requirements, and grading rubric.

### **Diversity Statement:**

The Department of Fisheries, Wildlife, and Conservation Sciences Science strives to create an affirming climate for all students including underrepresented and marginalized individuals and groups. Diversity encompasses differences in age, color, ethnicity, national origin, gender, physical or mental ability, religion, socioeconomic background, veteran status, sexual orientation, and marginalized groups. We believe diversity is the synergy, connection, acceptance, and mutual learning fostered by the interaction of different human characteristics.

#### **Student Code of Conduct**

Student conduct is governed by the university's policies. It is the students' responsibility to understand the university's policies. See the Oregon Administrative Rules, Student Conduct Regulations for full details. If necessary, incidents will be referred to the Student Conduct Office for disciplinary action. <a href="https://studentlife.oregonstate.edu/sites/studentlife.oregonstate.edu/files/code">https://studentlife.oregonstate.edu/sites/studentlife.oregonstate.edu/files/code</a> of student conduct final.pdf

## **Statement Regarding Students with Disabilities:**

Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at <a href="http://ds.oregonstate.edu">http://ds.oregonstate.edu</a>. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

### **Reach Out for Success:**

University students encounter setbacks from time to time. If you encounter difficulties and need assistance, it's important to reach out. Consider discussing the situation with an instructor or academic advisor. Learn about resources that assist with wellness and academic success at <a href="https://oregonstate.edu/ReachOut">oregonstate.edu/ReachOut</a>. If you are in immediate crisis, please contact the Crisis Text Line by texting OREGON to 741-741 or call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255)

#### **Academic Calendar**

All students are subject to the registration and refund deadlines as stated in the Academic Calendar: <a href="https://registrar.oregonstate.edu/osu-academic-calendar">https://registrar.oregonstate.edu/osu-academic-calendar</a>.

#### **Student Bill of Rights**

Student Bill of Rights: OSU has twelve established student rights. They include due process in all university disciplinary processes, an equal opportunity to learn, and grading in accordance with the course syllabus: <a href="https://asosu.oregonstate.edu/advocacy/rights">https://asosu.oregonstate.edu/advocacy/rights</a>

#### **Academic Honesty in the Performance of Coursework:**

Academic dishonesty is defined as an act of deception in which a student seeks to claim credit for the work or effort of another person or uses unauthorized materials or fabricated information in any academic work. While it is not always possible to determine if academic dishonesty was intentional or accidental, ignorance of the definition or types of plagiarism does not permit immunity from

repercussions. If you have any uncertainties regarding the details of what constitutes Academic dishonesty, definitions can be found on the Student Conduct Regulations website. If you require assistance in avoiding these actions, please contact the Oregon State University Writing Center Staff. Any work submitted through this course may be checked using "TurnItIn" or a similar plagiarism prevention tool.