

Soils 495

CROPS/SOILS/HORT 495

RESEARCH EXPERIENCE

Justification and Goals

One of the goals of the WSU Strategic Plan is to strengthen the undergraduate students' experience at a research university. The course would provide students the opportunity to interact one-on-one with faculty mentors within departments and gain a more in-depth understanding of literature reviews, experimental design, implementation, and interpretation of research. Students in Soil Science, Crop Science, and Horticulture areas currently have little opportunity to develop their independent research skills except through part time work experience. This course would allow students to be involved with 'hands on' research and work closely with individual faculty.

Credit

Variable credit (1 to 4) will make the course flexible in the number of contact hours required as part of the research experience. Making the course repeatable will allow a student to participate in several different research projects, or in long term, on-going research. Students will be required to present a research poster or write a paper summarizing their research at the completion of each semester.

Form of Instruction

Field or lab research with supervision by faculty mentor. Students should meet with the faculty mentor before registering for the class. The course would be restricted to undergraduate students.

Class Time

To be arranged.

Proposed Text Book

No textbook requirement. Research literature as recommended by the faculty mentor.

Objectives/Expectations

1. To provide students the opportunity to develop independent research skills.
2. To develop a research paper or poster on their research project.
3. Mentors and students will be required to complete an agreement form outlining the expectations of the research and associated costs. The agreement should specify hypothesis, objectives, proposed methods, time schedule, and end product.

Grading

Grades will be based on demonstration of critical thinking skills used in developing, interpreting, and executing the research. Theses grades will be based on the student and faculty mentor's expectations stated in their initial agreement form. Grades will also be based on the research paper or poster.

1. Research planning and execution 50%
2. Research paper or poster 50%

Grading Scale

100-93%	A	76-79%	C+
90-92%	A-	73-75%	C
86-89%	B+	70-72%	C-
83-85%	B	66-69%	D+
80-82%	B-	62-65%	D
		< 62	F

Course Outline (will vary with credits taken and research project conducted)

Week 1 = Lab/field orientation and safety

Weeks 2 to 4 = Literature review and development of a hypothesis

Week 5 = Propose materials and methods

Weeks 6-12 = Research activity

Week 10 to 14 = Summarizing (tables, graphs, etc.) and analyzing results

Week 14-15 = Research poster or paper preparation

Week 15 = Poster or paper due

Disability statement

“Reasonable accommodations are available for students who have a documented disability. Please notify the instructor during the first week of class of any accommodations needed for the course. Late notification may cause the requested accommodations to be unavailable. All accommodations must be approved through the Disability Resource Center (DRC) in Administration Annex 206 (Tel. 335-1566).”

Cheating (WAC 504-25-310)

Cheating is the intentional use of, or attempt to use, unauthorized material, information, or study aids in any academic activity to gain advantage. Cheating includes, but is not limited to, communicating improperly with others, especially other students, during tests or the preparation of assignments for classes; copying from books, notes, or other sources during a test when this is not permitted; copying from another student’s work (reports, laboratory work, computer programs, files, etc.); making improper use of calculators or other devices during a test; illegitimately procuring or using copies of current examinations; allowing a substitute to take an examination or write a paper for oneself.

Plagiarism (WAC 504-25-310)

Plagiarism is knowingly representing the work of another as one’s own, without proper acknowledgment of the source. The only exceptions to the requirement that sources be acknowledged occur when the information, ideas, etc., are common knowledge.

Plagiarism includes, but is not limited to, submitting as one’s own work the work of a “ghost writer” or work obtained from a commercial writing service; quoting directly or paraphrasing closely from a source without giving proper credit; using figures, graphs, charts, or other such material without identifying the sources.

Academic Integrity Processes (WAC 504-25-315)

Every act of academic dishonesty affects academic evaluation of the student and also is a violation of the University's standards of conduct. Responsible instructors retain the authority and responsibility to assign grades to students, considering from an academic standpoint the nature of the student's action. This is the case even when the case is referred to the University Academic Integrity Process. Students have recourse to appealing the responsible instructor's assignment of grades according to usual academic policy. See Academic Regulation 104.

All clear instances of academic dishonesty shall be reported to the Office of Student Conduct as outlined in 504-35-335(2). The first reported instance at WSU of academic dishonesty by a student will be treated as purely an academic matter unless, in the judgment of the responsible instructor, more serious action should be taken through the disciplinary process. Any allegation of subsequent academic dishonesty will be treated as a matter to be referred to the Office of Student Conduct

Reports of Academic Dishonesty (WAC 504-35-320)

Any member of the University community who witnesses an apparent act of academic dishonesty shall report the act either to the instructor responsible for the course or activity or to the Office of Student Conduct.

HORT/CROPS/SOILS 495

UNDERGRADUATE RESEARCH EXPERIENCE

This form allows coordination between the student and faculty mentor to track progress and to assign a grade. The student must:

- 1) Complete this form
- 2) Develop a brief and concise written agreement outlining the expectations of the research, including title, hypothesis, objectives, materials and methods, time schedule, and end product.
- 3) Obtain faculty mentor and student signatures
- 4) Return a copy of this form to the student's faculty mentor, academic advisor, and Dr. Teresa Cerny-Koenig, Johnson Hall 155.

It is the responsibility of the student to register for the course and make sure the form is filled out and returned to the main office.

Student's Name (please print) _____

Major _____ Advisor _____

WSU ID# _____

Pullman Phone # _____ E-mail _____

Credit hours of 495 _____ Semester _____ Year _____

Title of Research Project _____

Please attach the written agreement to this page and sign the form below to indicate that you have read and approve of the expectations of the research.

Student's Signature Date

Faculty Mentor's Signature Date