



## Syllabus for CSE195-02: Upper Division Undergraduate Research

Spring 2017

Instructor: Alberto Cerpa

**Designation:** Upper Division Undergraduate Research

**Catalog Description:** Supervised research. Permission of instructor required. May be repeated for credit. Please note the grade will be Pass or No-Pass ONLY.

**Text Books and Other Required Materials:** Varies with individual research needs.

**Course Objectives/ Student Learning Outcomes:** This course gives upper-division undergraduates the opportunity to engage in laboratory, field, theoretical, and/or computational research under the supervision of a faculty member on a topic of mutual interest. The unit value may range from 1 to 8 depending on the amount of time the student wishes to spend on research (see below). The course may be repeated for credit, either on different topics or on a single research project spanning multiple semesters. Please note the grade will be Pass or No-Pass ONLY.

Upon completion of CSE 195, students should be able to:

- Integrate fundamental knowledge and scientific and technical skills into scientific inquiries, formulate well-defined and quantitative questions, develop testable hypotheses, design and execute experiments, analyze and interpret results and reach appropriate conclusions.
- Critically analyze the work of other scientists and assess its correctness, importance, and relevance.

**Program Learning Outcomes:**

**Prerequisites by Topic:** Upper division standing.

**Course Policies:** This course will be

**Academic Dishonesty Statement:**

- a. Each student in this course is expected to abide by the University of California, Merced's Academic Honesty Policy. Any work submitted by a student in this course for academic credit will be the student's own work.
- b. You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give "consulting" help to or receive "consulting" help from such students. However, this permissible cooperation should never involve one student having possession of a copy of all or part of work done by someone else, in the form of an e mail, an e mail attachment file, a diskette, or a hard copy. Should copying occur, both the student who copied work from another student and the student who gave material to be copied will both automatically receive a zero for the assignment. Penalty for violation of this Policy can also be extended to include failure of the course and University disciplinary action.
- c. During examinations, you must do your own work. Talking or discussion is not permitted during the examinations, nor may you compare papers, copy from

others, or collaborate in any way. Any collaborative behavior during the examinations will result in failure of the exam, and may lead to failure of the course and University disciplinary action.

**Disability Statement:** Accommodations for Students with Disabilities: The University of California Merced is committed to ensuring equal academic opportunities and inclusion for students with disabilities based on the principles of independent living, accessible universal design and diversity. I am available to discuss appropriate academic accommodations that may be required for student with disabilities. Requests for academic accommodations are to be made during the first three weeks of the semester, except for unusual circumstances. Students are encouraged to register with Disability Services Center to verify their eligibility for appropriate accommodations.

**Topics:** Varies with individual research.

**Class/laboratory Schedule:** Meeting schedules vary with individual research needs.

**Midterm/Final Exam Schedule:** There are typically no examinations administered as part of this course.

**Course Calendar:** The course calendar of events varies with individual research needs.

**Professional Component:**

**Assessment/Grading Policy:** In order to receive a passing grade, the student must spend an average of at least three hours per week per unit on research-related activities. These may include laboratory or computational work, development of theoretical results, reading and study related to the research project, searching the scientific literature, participation in research group meetings, and writing of research reports or manuscripts. Beyond this, grading is based on:

- Quality of the research performed. Research necessarily involves trying to do something new, and failure to achieve the desired goal does not, by itself, result in a poor grade. Evaluation will be based on the care and accuracy with which the work is performed, use of proper scientific methodology in planning experiments and recording and analyzing data, use of the scientific literature and the student's coursework background to understand the basis of the research, and initiative taken by the student in moving the research forward.

Please note the grade will be Pass or No-Pass ONLY. No Letter Grade will be given.

**Coordinator:** Alberto Cerpa

**Contact Information:** acerpa@ucmerced.edu

**Office Hours:** By appointment