Department of Chemistry  
CHE 495-496 Senior Research  
Fall 2013, Spring 2014

Curriculum Requirements Satisfied
EXP+ (Experiential Learning- Apply Knowledge and Skills beyond the Classroom)
ESI (Evaluate and Synthesize Researched Information)
SPK (Speak Effectively Before and Audience)

Instructor  
Most chemistry faculty members mentor undergraduate research students. Each faculty member is assigned a different section of CHE 495-496.

Meeting Times  
To be arranged with student’s research mentor. The expectation is that the student will spend 3-4 hours per week per credit (corresponding to 9-12 hours per week).

Course Description  
CHE 495-496 is a two-semester research program to be carried out under the supervision of a staff member. The results of this work are to be submitted to the department in the form of a senior research report. The student is given an oral examination in May by a faculty committee consisting of the student's supervisor and three other faculty members. Students receive only one grade upon completion of the six credit sequence CHE 495-496.

Course Prerequisites  
U4 standing; permission of instructor and department

Course Learning Objectives
• Students will be able to search the primary literature to find references relevant to their research.
• Students will develop proficiency in critically reading primary literature relevant to their research
• Students will be able to safely perform the appropriate laboratory or computational techniques needed for their research
• Students will develop proficiency in designing experiments
• Students will be able to evaluate data collected
• Students will be able to communicate the motivation for, process of, and findings of their research in both written and oral presentations
Course Requirements

Though the nature of a research project may vary for different sub-fields of chemistry, students will be involved in the design, execution, and analysis of experiments. Students are required to complete all relevant safety training and, working with their research mentor, assess the appropriate safety measures for all lab activities. Students are expected to spend 9-12 hours per week (including time in and out of lab) on their research project. All students are required to submit a written thesis at the end of the two semester sequence. Some research advisors may require additional periodic written reports. Students will present their research orally in May and field questions in an oral examination by a faculty committee consisting of the student's supervisor and three other faculty members.

Grading

A course grade will be determined at the end of the two semester sequence by the oral examination faculty committee. Grading criteria are: progress made in research, understanding of research as demonstrated in the oral and written presentations and in the fielding of questions, effort made throughout the year.

Academic Integrity

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary/.

Disabilities

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, Room 128, (631) 632-6748. DSS will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services.

Critical Incident Management

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach compromises the safety of the learning environment, or inhibits students' ability to learn.