Syllabus: Undergraduate Thesis (GEOS 499)
Autumn 2008

Course Objective

To provide an overview of the basic elements of conducting successful undergraduate research in Geoscience and write a final version of an undergraduate thesis for presentation to the Department of Geosciences faculty and students. Topics covered will include tools for conducting research, reading and interpreting scientific papers, outlining and writing the thesis and presenting the thesis to the public. The course is intended for upper division Geoscience majors completing a thesis as a capstone for their Geoscience curricula.

Week 1: Overview of graduation requirements, Geosciences equipment and facilities available for student research.
Week 2: Conducting geoscience research, reading and discussing the geoscience literature and building an outline of your thesis work.
Week 3: Basic structure of the thesis, fundamental objectives of scientific research and objectivity in writing results, composition and structure, sources of information about science writing and style help.
Week 4: Review and editing—what to expect during the review process of your thesis.
Week 5: Outline and basic reference list of thesis due.
Week 6: Outline returned and review of outline and discussion of what is missing and/or what is extra.
Week 7: Expanded outline and Methods section of thesis due.
Week 8: Work returned and discussion of what is missing, composition
Week 9: Introduction and results section of thesis due.
Week 10: Discussion of work to date and building the final thesis (production of a professional document).
Week 11: First draft of thesis due, including all sections, references, figures, tables and supplementary information.
Week 12: Edits on first draft returned and discussion of developing the thesis presentation.
Week 13: Final draft of thesis due.
Week 14: Comments and discussion for production of final draft and practice thesis presentation.

Week 15: Final presentation to the Department of Geosciences of the thesis.