SENIOR PROJECT

**Description:** Capstone experience in physics.

**Goal:** Synthesize and apply conceptual understanding and practical knowledge gained from previous coursework to conduct a feasible research project over a single semester.

**Eligibility:** Physics majors are required to complete a Senior Project in their final year. Students are strongly encouraged to discuss research interests and potential projects with faculty members at any time during their studies, but must select a supervisor and identify a general research topic by the end of their junior year.

**Work Load:** Students are expected to work approximately 12 hours/week on the project, including meetings between student and supervisor.

**Proposal:** Submit to the Physics Department office by the last day of classes of the junior year a short project proposal, containing the name of faculty supervisor, a tentative title, and a brief description of the proposed project.

Selection of a feasible project is a key to the success of the course. All research proposals undergo committee review and need approval.

**Evaluation:** The Department Head will appoint a faculty committee to oversee Physics 489 for each year. The committee will assign final grades at the end of the semester.

**Schedule:** The following reports/presentations are required:

1. *Midterm oral report*, 20-min presentation and questioning by committee (after 10 weeks).

2. A *draft of the final written report* is due to the committee prior to the final oral presentation.


4. *Final written report* is due after the presentation and must incorporate feedback from the draft of the final report and from the oral presentation.

Deadlines will be set by the committee; they can only be extended under exceptional circumstances. Written reports must follow the AIP style manual format [http://public.lanl.gov/kmh/AIP_Style.4thed.pdf](http://public.lanl.gov/kmh/AIP_Style.4thed.pdf).

**Grading:**

A: 90-100%, B: 75-89%, C: 60-74%, D: 50-59%, F: < 50%

Grades are based on quality of proposed research, final written report, and final oral report/examination. All reports and presentations must be on a technical level comparable to Scientific American articles, i.e., understandable by someone with a general physics background.
Coursepack: All work in this course must be completed in a manner consistent with NDSU University Senate Policy, section 335: Code of Academic Responsibility and Conduct: http://www.ndsu.nodak.edu/policy/335.htm Any students with disabilities who need accommodation in this course are encouraged to speak with the project supervisor as soon as possible to make appropriate arrangements.