

Senior Design Guidelines

Operation:

All students must enroll in both PHGN 471/472, Senior Design Principles (0.5 credit hrs for 7 one-hour class meetings, taught by one member of the faculty) and PHGN 481/482, Senior Design Practice (2.5 credit hrs for 7.5 hours per week of independent project work supervised by a Project Mentor). [Note: In the fall of 2007 registration will be handled under the combined number, PHGN 471. This will be changed in time for preregistration for the spring 2008 semester.]

Team structure:

- 2 to 4 students for all projects. Individuals are expected to be working under Honors status. The SDOC will still review special requests from Project Mentors or students for an individual project without Honors status.
- Students form their own partnerships if possible
- All project associations, team assignments, and mentor changes must be approved by the Senior Design Oversight Committee (SDOC).

Team operation:

- All students sign performance contract, which includes rules of how the team will conduct business.
- Students meet regularly with advisor at a set time, attendance is required. Each student comes prepared to present status of project, rotate who presents.
- Research advisor may require periodic written summary of work (1 page, possible graphic supplement). Students submit summaries to advisor in rotation, at interval of 1 or 2 weeks, at the option of the research advisor.
- Students meet periodically as a team to collaborate, share information, and plan future activity.

Formal reports:

- Written: Single document, done as a team. Introduction and conclusion are common and graded as team activity. Each student's section includes that student's byline. Sections will be graded individually, and grades assigned to individual students will differ.
 - Written reports are submitted simultaneously to both the Project Mentor (who evaluates the organization and technical content) and the Instructor of Senior Design Principles (who evaluates communication and writing quality).
 - Mid-year Interim Written Report: Due toward the end of the fall semester. Covers background material, project methods, preliminary results, and a description of future work to be completed during the second semester.

- Final Written Report: Due toward the end of the spring semester. Covers the entire project; background, methods, results, interpretation, conclusion.
- Poster: Each student prepares a poster and an associated 5-minute poster presentation. Posters are displayed during a special session toward the end of the spring semester
- Notebook: Each student keeps a separate research notebook. All entries are dated. notebooks include literature and background references and summaries, planning and concept development, detailed descriptions of methods, chronological itemization of activities, analysis of results, documentations of conclusions. The notebook should be a stand-alone record from which the project could be duplicated. It is turned over to the Project Mentor at the end of the year.

Assessment:

Letter grades are assigned each semester for 0.5 credit hours by the Instructor of Senior Design Principles, based on written assignments covering the topics discussed during the seven class meetings, an evaluation of the technical writing quality in the formal reports, and (in the case of the second semester) on the poster and poster presentation.

The grade for 2.5 credit hours in Senior Design Practice is assigned by the Project Mentor. Evaluation is based on contribution to the team effort and individual accomplishment in work on the project (according to a rubric developed by the SDOC) as well as on the organization and content of written reports, which also includes the individual's notebook. The Project Mentor has the ability to replace the first semester grade with a higher academic year grade as a reward for improvement during the second semester.