

Syllabus  
EE 4010 - Senior Project I  
Fall 2014

**Description:** Students are required to complete a 300-hour engineering project (over two semesters) in a team environment. This course is an opportunity for students to apply the concepts they have studied in lower division courses toward solving a real problem. Project management and problem solving techniques will be emphasized. Topics include developing a project plan, writing contracts, goal setting, conducting research, project design and analysis, and design review presentations.

**Coordinator:** Dr. Fon Brown, 626-7781 (Office), Room ET 236B

**Office Hours:** Office hours are posted at [faculty.weber.edu/fonbrown](http://faculty.weber.edu/fonbrown)

**E-mail:** [fonbrown@weber.edu](mailto:fonbrown@weber.edu)

**Time and Location:** 12:00 – 12:50 PM First 2 Tuesdays of the semester, ET Room 210. By appointment thereafter.

**Prerequisite:** Permission from Department.

**Credits:** 2

**Text:** EE Senior Project Workbook (Supplied).

**Student Learning Outcomes:** The students will demonstrate:

1. The ability to conduct research in support of an engineering problem.
2. The ability to utilize the latest computer design and analysis tools in solving engineering problems.
3. The ability to use problem-solving skills in the identification, design, and implementation of an engineering problem.
4. The ability to work in a team environment.
5. The ability to write effective resumes, contracts, and technical manuals.
6. The ability to conduct effective engineering design reviews.
7. An understanding of the need for life-long education and professional development.
8. An understanding of the importance of quality, timeliness, and continuous improvement.
9. The ability to identify and complete realistic and effective short-term and long-term goals.

**Project:** All requirements for the project and the grading criteria are included in the Senior Project Workbook, distributed on the first day of class.

**Schedule:**

First Class Period: Reports from students in EE 4020 (if any). Schedule team meetings for students in 4020. Dismiss students in EE 4020. Pass out workbooks and log books. Go over syllabus and expectations. Present community involvement projects, if any.

Second Class Period: Turn in project proposals, Schedule team meetings.

**Weekly Meetings:** After the second week of class, teams will meet with the Senior Projects Coordinator for 20 minutes each week instead of attending the scheduled class period. Prior to each meeting, students should set goals for the coming week. In the meeting, the coordinator will (a) assess the accomplishment of the previous week's goals, (b) review and approve the goals for the coming week, and (c) aid the team with technical issues where appropriate.

**Student Assessment:** Letter grades (A-E) are assigned for individual activities as specified in the workbook. These grades are assigned a percentage. (Each 'A' is assigned 100%; each 'A-' is assigned 96.7% and so on. 'E' has no point value.) A composite percentage is then computed by averaging these components using the weights below:

Team Building	20%
Project Management	30%
Research & Development	30%
Communication	20%

**Grading:** Letter grades (A-E) are assigned according to the tables below:

From	To	Grade	From	To	Grade
100.0%	97.8%	A	84.4%	81.2%	C+
97.7%	94.5%	A-	81.1%	77.8%	C
94.4%	91.2%	B+	77.7%	74.5%	C-
91.1%	87.8%	B	74.4%	64.5%	D
87.7%	84.5%	B-	64.4%	0.0%	E

**Attendance:** Attendance and late work policies for students are specified in the Senior Project Workbook. In the event that the coordinator cannot attend a team meeting, that meeting will be omitted for the purpose of computing a grade. If fewer than two of the EE faculty can attend a design review or if the campus is closed, the design review will be rescheduled.

**Community Based Learning:** Students who choose to partner with community organizations for their project must register with the Community Involvement Center, located in the Shepherd Union Building, Room 327.

**Services for Students with Disabilities:** Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in Room 181 of the Student Services Center. SSD can also arrange to provide course materials (including the syllabus) in alternative formats if necessary.