ECE 3090
Project Management

**Description:** An introduction to project management. The course prepares students for Senior Projects. Course will include the writing of contracts, goal setting, project leadership and team building principles of engineering economics, team work, quality, statistics, and continuous improvement will be discussed. Other topics include project life cycles, organization, and risk management. Project scheduling and performance will be discussed. The course will be taught as a seminar.

**Information:** ECE 3090 Project Management is a required course for the BS EE and CE degrees. This course is considered one of the communication curriculum components and should be taken the semester before starting the senior project series ECE 4010 and 4020.

**Student Learning Outcomes:** The students will demonstrate:
1. A knowledge of engineering economics, quality, statistics, risk management, and organizational skills
2. A knowledge of personal finances, purchase and justification of equipment, labor expenses, and time management.
3. The ability to work effectively on a team to accomplish established goals.
4. The ability to give a formal presentation.
5. The ability to schedule a project using Gantt Charts and record project history using lab books.
6. An understanding of professional, ethical, and societal responsibilities
7. An understanding of diversity, professional, societal, and global issues.

**Student Assessment:** The following student assessment criteria will be used:
1. Homework assignments (60%)
2. Attendance (20%)
3. Presentation (20%)

**Course Assessment:** The following course assessment criteria will be used:
1. Student review (each semester course is taught)
2. ECE Department Chair and faculty review
3. ECE Advisory Committee review

**Credits and Contact Hours:** One credit hour and one contact hour per week

**Prerequisite:** Pre/corequisite MATH 3410

**Text:** Project Engineering: The Essential Toolbox for Young Engineers
Frederick Plummer
ISBN: 978-0750682794

AND/OR
Project Management for Engineering and Construction
Garold Oberlender
ISBN: 978-0071822312

**Topic Outline:**
1. Log books and weekly goals
2. Meetings: one-on-one, team, cross-discipline, and company wide
3. Contracts: format, statement of objectives for each term, project descriptions
4. Communication, teambuilding skills
5. Project Life Cycle
6. Organizational strategy
7. Financial models
8. Leadership
9. Project scope
10. Team building, conflicts, and negotiations
11. Risk management
12. Cost estimating and budgeting
13. Project scheduling, Gantt Charts
14. Project closure
15. Formal presentation

**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.