EE 402 – Senior Design Seminar – 1 hour
Required course

1. 2007-2008 Catalog description
Students work in teams on a large-scale electrical engineering project, considering technical and non-technical factors in seeking an optimal solution. Prerequisite: Senior standing in EE.

2. Prerequisites by topis
a. Analog and digital design experience through sophomore, junior, and senior microprocessor projects

3. Textbook (s) and/or other required material - Course handouts

4. Class/Laboratory Schedule
Two sessions per week, each 50 minutes, for 7 weeks

5. Topics Covered (Outcomes influenced)
- Entrepreneurship and business plans (Guest lectures & class lectures) (7a)
- Marketing and engineering (Guest lecture) (7a)
- Team work dynamics and interpersonal skills (Guest lecture) (7a,b)
- Product liability (Guest lecture) (7a,b)
- Professional ethics via ethics game and guest lectures (7a,b)

6. Contribution of course to meeting curriculum components
Engineering design – 100%

7. Course Outcomes (Program Outcome contributions)
a The student will engage into product engineering in an entrepreneurial environment by working on an interdisciplinary team to prepare a business plan for a venture based on a new electronic product. (9B, C, D, F, G)
b The student will work with his/her team to consider professional and ethical problems (9D, G)

8. Grading Policy: The level to which students achieve the course outcomes is based on the following components:
Group Grade
- consultant(s) with appropriate skills and background "hired" (A if "hired" or IN for course if not) (5%)
- product idea including functional description and first cut analysis of target market (5%)
- draft of business plan (10%)
- written business plan (25%)
- documentation of team activity (10%)
- evaluation of consultant's contribution (5%)

Individual Grade
- attendance at presentations of guest speakers and ethics game sessions (35%)
- quality of peer performance evaluation (5%)

Each component will be assigned a value between 0 and 4, where 0 corresponds to F, 1 corresponds to D, 2 corresponds to C, 3 corresponds to B, and 4 corresponds to A. In the case of the components for which the student's individual effort can't be ascertained, then all students on a team will receive the same grade for the component. These components are listed under the Group Grade. In case of the attendance category, the student will be decremented a point for each unexcused absence. Your course letter grade will be determined by first computing a weighted average course GPA (cpga) based on the above deliverables and assigning the letter grade as follows.

$3.5 < cgpa < 4.0$ --- A
$2.5 < cgpa < 3.5$ --- B
$1.5 < cgpa < 2.5$ --- C
$0.5 < cgpa < 1.5$ --- D
$cgpa < 0.5$ --- F

A grade of C corresponds to meeting the minimum competency required to understand course topics and meet course objectives.

9. Relationship of course to program outcomes

label	Program Outcomes (A Graduate from the program will:)	Contribution
A	demonstrate knowledge of the mathematical and scientific foundation of electrical engineering	Foundational
B	demonstrate knowledge of and the ability to apply techniques and technology of electrical engineering	Strong
C	complete a design project sequence, culminating in a capstone project at or near the professional level	Strong
D	demonstrate the ability to acquire new knowledge as needed for success in the electrical engineering profession	Strong
E	meet Bradley's general education requirements which are based on the principles of liberal education	NA
F	have experience in communicating technical information and working on teams	Strong
G	understand the importance of professional and ethical behavior	Strong

10. Prepared by: Brian D. Huggins 2/4/02