Course and Contact Information

Instructor: Your Project Advisors. Your EE297B advisor(s) must also be your EE297A advisor(s). In special circumstance that you must change your project advisor(s), approvals from project advisors and Graduate Coordinator are required.
Your EE297A advisor can deny to serve as your EE297B advisor based on your performance. In this special circumstance, you need to discuss with Graduate Coordinator to resolve the issue.

Class Days/Time:
- Meet the Graduate Coordinator on the first Friday of the semester (August 24, 2018, from 1:00 to 1:30, in room ENG 345). Other meetings will be announced via emails by Graduate Coordinator. All meetings with Graduate Coordinator will be on Fridays from 1:00 to 1:30 in E345
- Have regular meetings with your project advisor(s) throughout the semester as scheduled by your project advisor(s)
- Will receive several emails from Graduate Coordinator. Make sure to follow the instructions and required submissions stated in the syllabus, in the emails, and in meetings with Graduate Coordinator. Strict rules will be applied to the course.

Prerequisites: Good standing (both overall GPA and GPA on Candidacy form are 3.0 or above), EE297A or EE299A with grade CR, EE295 with grade C or above or satisfaction of GWAR.

Project Team: Maximum number of students per project is two (2). A large project can be divided into several smaller projects.

Enrollment: Enroll into EE297B by requesting for an addcode from the EE department office. Proof of passing EE297A/EE299A is required (show your unofficial transcript to EE office staff)

Grading Scheme: Letter Grades (A+, A, A- ….. C+, C, C-, D+, …, F) – Note that "C" is a passing grade for graduate-level courses. Read the "Grading Information - Outcome Assessment" section on this syllabus

Course Description
EE297B is a course designed to help students complete a culminating experience master project. Students complete this course by completing all work required by their project advisor(s) and (on-time) submitting an approved project report, similarity report from turn-it-in, and project poster for Student Projects Symposium event. The work is under the direction of project advisor(s) and there is not EE297B class instruction. The EE Graduate Coordinator will coordinate document submission and the Student Project Symposium Chair will coordinate the EE297B posters presentations.
Important notes:

- **One (1) or two (2) students per project only**, more than two (2) students per project is NOT allowed. This rule is applied to all submissions also, which means that no more than two (2) student names on any submission. Discuss with your advisor to divide large project into small projects.

- If your project advisor is a part-time faculty, you must have a full-time EE faculty to serve as a co-advisor.

Course Learning Outcomes

Upon successful completion of this course, students will be able to:

- Strengthen their critical thinking skills
- Develop skills for planning and scheduling a significant project
- Plan and manage their time for a project effectively
- Prepare documents without plagiarism
- Communicate written engineering concepts clearly
- Orally present project concepts effectively
- Work as productive members of an industrial team
- Continue to further PhD studies

Critical thinking has been described as:

*A person who thinks critically can ask appropriate questions, gather relevant information, efficiently and creatively sort through this information, reason logically from this information, and come to reliable and trustworthy conclusions about the world that enable one to live and act successfully in it. *... critical thinking mimics the well-known method of scientific investigation: a question is identified, a hypothesis formulated, relevant data sought and gathered, the hypothesis is logically tested and evaluated.*

Students who can think critically can:

- Determine what information is required to achieve an objective, find that information, and apply it
- Create designs from limited information
- design tests that can prove that a design meet a specification
- identify design errors, and adjust a design to meet specifications
- Ask meaningful questions after exhausting available resources when seeking help.

A course goal is students learn to enjoy a master project through a *hand-on* approach.

Textbook

There is no textbook for EE297B

Course Requirements and Assignments

- Meet with project advisor as required and/or scheduled by the project advisor
- Continue to study/implement the project proposed in EE297A. The implementation or study process needs to be regularly checked and evaluated as satisfaction by the project advisors
- Complete and submit on time all required documents (see the "Required Submissions" and "Tentative Course Schedule" sections) approved by project advisors
- Attend and present the project at the Student Project Symposium
Course Plan, Expected Work Load, Goals, Objectives …

EE297B is a 3 unit class. Students should spend 3 hours directed by their advisor each week. Some advisors meet with students in a group setting and some prefer to meet with each team separately. The advisor time will most likely be back loaded with proposal revisions and project reviews. In addition, EE297B students are expected to spend approximately 15 to 30 hours per week on research, project development, debug, and document writing.

Responsibilities

EE297B is a project class. The responsibilities are divided between the Graduate Coordinator, Student Project Symposium Chair, the student, and faculty project advisor. The following table lists the responsibilities of each party during EE297B

R = Responsible   A = Advise    M = Manage    F = Facilitate

<table>
<thead>
<tr>
<th>What</th>
<th>Graduate Coordin</th>
<th>Proj. Symp. Chair</th>
<th>Proj. Advisor</th>
<th>Student</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time management</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
<td>Must be strictly on time</td>
</tr>
<tr>
<td>Project completion</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
<td>Advisor can be a good resource</td>
</tr>
<tr>
<td>Project submission</td>
<td>F</td>
<td></td>
<td>A</td>
<td>R</td>
<td>Student completes, advisor approves, student submits</td>
</tr>
<tr>
<td>Grammar check</td>
<td></td>
<td></td>
<td>A</td>
<td>R</td>
<td>Use grammar checker(s)</td>
</tr>
<tr>
<td>Plagiarism check</td>
<td>F</td>
<td></td>
<td>A</td>
<td>R</td>
<td>Submit to canvas</td>
</tr>
<tr>
<td>Presentation schedule</td>
<td></td>
<td>F</td>
<td>M</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>Poster</td>
<td></td>
<td>F</td>
<td>A</td>
<td>R</td>
<td>Student prepares &amp; submits</td>
</tr>
<tr>
<td>Project grade</td>
<td>R</td>
<td>R</td>
<td></td>
<td>M</td>
<td>Project Advisor must ensure grade to be submitted to Graduate Coordinator on time</td>
</tr>
</tbody>
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Required Submissions

Requirements for EE297B submission are listed as below. Due dates for these submissions are listed on the "Tentative Course Schedule" on the last page of the syllabus.

Instructions for creating project posters and sample posters are on the class canvas

Grading Information - Outcome Assessment

Students who did not submit completed set of project documents (project report, turn-it-in summary report, poster, etc…) or failed to submit them on time or did not complete the poster presentation will automatically receive grade F and must repeat the class. A student who completed the submission and poster presentation will have his/her grade assigned by the project advisor. Each advisor has his/her grading standard. Many advisors feel a passing grade requires preparation for publication. Each student should consult with their project advisor to determine the advisors grading standards. Not all students will receive a passing grade. The advisor will access the quantity and quality of the work performed.
Students who fail to complete the project will be given the fail grade. Team members may receive a different grade if the advisor feels the students have contributed unequally to the results.

In general, your project will be graded based on the following criteria:

- **NOVELTY** (0-25 points): New facts, ideas, insights, innovative elements
- **METHODOLOGY** (0-25 points): Justification, sufficiency, validity
- **THE RESULTS** (0-25 points): Significance, quality, quantity, complexity, necessary details
- **REPORT PRESENTATION** (0-25 points): Discussion of related work, clarity, English, appearance (layout, figure, tables etc)

**Timely submission**

It is important you submit your work on time. Most students require several revisions of the report, both for grammar as well as technical content revision. Your advisors are very busy at the end of the semester. It may take them several weeks to review and comment on your report. Don't waste your advisors time by submitting a poorly written report with many grammar errors. Many students run out of time, and try to do the report quickly. It is then rejected, and revisions are required. You should have a draft report ready at least 3 weeks before the final submission. Many advisors are very busy during the last 2 weeks of instruction and are hard to find after the last day of instruction (are very busy in grading exams and preparing grades.) There are no office hours after the last day of instruction until the first day of instruction the following semester. Timely submission is your responsibility. Talk to your advisor to determine how much time they will need to review your paper. Think about your past writing, and plan time for revisions so you can be proud to have others see your work. The EE department may publish your report on the web. Use the automated tools to ensure your paper is free of grammar errors, and has no plagiarism problems before submitting to your advisor.

**Time and project management**

Students are expected to develop and practice time management skills. The project is a major work with limited instruction and instructor management. Students are expected to invest approximately 400 hours in their project work. This work cannot be done in a few weeks or at the last minute. Each student is expected to complete the proposed project. Significant time management maturity is required to complete a project during an internship or while working. Students are expected to plan and execute for success. Last minute project scope changes may result in significant problems. Students are responsible to manage their project to success.

**Advice on Report format**

The guidelines for M.S. Project report and proposal are on the EE department website at [http://ee.sjsu.edu/content/projectthesis-guidelines](http://ee.sjsu.edu/content/projectthesis-guidelines). For project report, follow the format described in the "Guideline for Writing M.S. Project Report" at [https://ee.sjsu.edu/files/public/MSEE/master_project_report_guidelines_1_1.pdf](https://ee.sjsu.edu/files/public/MSEE/master_project_report_guidelines_1_1.pdf). Reports typically have about 100 pages of written text. This does not include tables of content, code listings, figures, drawings, schematics, simulation plots, etc. Many students fall into a trap of just placing a number of figures at the end of the document, and hope no one reads the report. Every figure should have at least ½ the figure height of text explaining the figure. If you have nothing to say beyond the title for the figure/table, then you should discuss why the figure needs to be in the report, and not in an appendix.
These reports will be published, and you and your advisor should be proud of your work and willing to show the world what you have done.

**Advice on paraphrasing/plagiarism**

Some students plagiarize unintentionally because they do not use proper paraphrasing. You CANNOT copy anything directly from another source, even something as small as a part of sentence. Also, changing a word or two in a sentence is NOT proper paraphrasing. You need to take a concept and completely re-write it in your own words and style, and reference the location of the source of the concept. To improve your paraphrasing, when you read a paper or website, take detailed notes and write everything down in your own words. Then when you write your paper, use only your notes, not the original sources.

**University Policies**

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs’ Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/”

**EE Honor Code - Honesty and Respect for Others and Public Property**

The Electrical Engineering Department will enforce the following Honor Code that must be read and accepted by all students.

“I have read the Honor Code and agree with its provisions. My continued enrollment in this course constitutes full acceptance of this code. I will NOT:

- Take an exam in place of someone else, or have someone take an exam in my place
- Give information or receive information from another person during an exam
- Copy project information from others
- Use more reference material during an exam than is allowed by the instructor
- Obtain a copy of an exam prior to the time it is given
- Alter an exam after it has been graded and then return it to the instructor for re-grading
- Leave the exam room without returning the exam to the instructor.”

**Measures Dealing with Occurrences of Cheating**

- Department policy mandates that the student or students involved in cheating will receive an “F” on that evaluation instrument (paper, exam, project, homework, etc.) and will be reported to the Department and the University.
- A student’s second offense in any course will result in a Department recommendation of suspension from the University.
## Tentative Course Schedule

*Dates can be changed with notices by emails from Graduate Coordinator*

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Topic</th>
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<tr>
<td><strong>Friday, September 10</strong></td>
<td>Last day to add courses</td>
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</table>
| **Wednesday, November 28** | Document submission for Student Project Symposium *(Note that late submission will NOT be accepted and request for late submission will NOT be granted, absolutely. Questions about the symposium can be addressed to eesymposium-group@sjsu.edu)* One submission per group.  
Students are responsible for making sure that their advisors approved the posters for submission) Instructions for creating project posters and sample posters are on the class canvas.  
Students are required to print and mount their poster on a tri fold board, the template for the poster will be posted on Canvas. Students should purchase a tri fold board that is the size of 48W x 36H, it is highly recommended that students purchase the tri fold board first before designing the poster to ensure the margins along the folds align with the poster. An example of the tri fold board will be provided on Canvas. |
| **Friday, November 30 (1PM-4PM)** | Attend Student Project Symposium and present your work (attendance will be taken by graduate coordinator).  
Students are allowed to enter the ballroom to start setup at 1PM. All project groups will be given a table space of 3FT x 2.5FT, and an outlet. The space is for their project demo and poster display. |
| **December 3-4** | **December 3:** Last day to submit initial project report and obtain turn-it-in report on CANVAS  
**December 4:** Last day to submit initial project report, turn-it-in report, and poster through the provided link (this submission will send emails to your project partner (if exists), to your advisor, to your co-advisor (if exists), and to the graduate coordinator, and ask for their approval.)  
**ONE SUBMISSION PER GROUP.** |
| **December 17** | Submit the project report, turn-it-in report, and poster with signatures (one PDF file) on CANVAS. This is the PDF file attached to the email you receive when your project report is approved by you, your partner (if exists), your advisor, your co-advisor (if exists), and the graduate coordinator.  
**ONE SUBMISSION PER STUDENT.** |