Mechanical Engineering Department

Course: ME 295A Mechanical Engineering Project I, ME 295B Mechanical Engineering Project II, ME 299 ME Master’s Thesis,  
Class Code #: 22431, 22200, 20557

Semester: Spring 2015

Prerequisites: Admission to Candidacy for Master’s Degree and written proposal approved by instructor and Graduate Coordinator.

Reference: MS Thesis/Project Guide Book, Mechanical Engineering Department, College of Engineering, San Jose State University, 2014-2015. Available on-line, Check the ME Department Website for MSME Program, or Dr. Agarwal’s Webpage.

Class Hours: F 17:00-19:15, Room E 339

Instructor/Course: Dr. Fred Barez, E310H, 408-924-4298, fred.barez@sjsu.edu

Coordinator Office Hours: Mondays 14:20 – 16:20

Course Description: Advanced individual work in Mechanical Engineering including but not limited to research, design, development, and simulation studies.

Grading: CR or NC only. CR will be issued subject to completion of all course requirements including an approved proposal, documented records of visits with Study Committee Chair and Members, timely submission of written draft and final semester reports, and oral presentations.

Expectations: All ME 295A/ME 299 (first semester) students are expected to have their project/thesis proposals approved by their Committee Chair, Graduate Program Coordinator and Department Chair prior to start of the semester in order to receive a class permission code. No exceptions.

All the students are expected to:
- make an end of the semester presentation.
- provide an end of the semester report.
Course grades will be issued when the following items are received by the course coordinator prior to the ‘grades due date’:
- a copy of ‘report’ approved by the Committee Chair,
- a copy of the approved ‘Oral Presentation and Grade Form’ by the Committee Members and turned in by the Committee Chair to the Course Instructor.
All students are expected to work with their committee members in order to stay on track using the ‘Consultation’ form. All students are expected to work with their committee members to schedule a presentation time, preferably on Thursday May 14, 2014 (Conference Day, the day after the last day of the instructions). Have your committee members to reserve 5/14/2015 for end of the semester Presentations.

All students are expected to:
- turn in a ‘draft report’ for initial evaluation to their committee members and the course instructor two weeks before the last day of instructions, 4/29/2015.
- Turn in the approved final report by the last day of finals, 12/21/2015.

Important Dates:
- Last Day to Drop, Tuesday 02/03/2015
- Last Day to Add, Tuesday 09/10/2015
- One Page Progress Summary approved by the Committee Chair and turned in to the Dr. Fred Barez, Instructor/Course Coordinator Monday 03/17/2015
- ‘Rough Draft’ due to Committee Members, and Dr. Fred Barez, Instructor/Course Coordinator, Wednesday 04/29/2015
- End of the Semester Presentation Day, Thursday 05/14/2015
- Approved Final Report Due to Course Instructor Thursday 05/21/2015
(For ME 295A, Requires Committee Chair Approval Only)

Class Meeting Dates:
Friday 1/23/2015 Class Orientation
Friday 1/30/2015 Class Orientation
Friday 2/27/2015 Project/Thesis Planning: Research and Writing
Friday 3/13/2015 Project/Thesis Planning: Research and Writing
Friday 4/17/2015 End of Semester Presentation Practice
Friday 4/24/2015 End of Semester Presentation Practice

All ME 295B students are expected to complete their study during this period including submission of the approved Final Report to the Course Instructor per the dates outlined under ‘Important Dates’ above. However, the ‘Approved Final Report’ requires the approval signature of all committee members.

NOTE TO ME 299 Second Semester Students: Your last day to submit the Approved Final ‘Thesis’ by the Committee to the Graduate Studies and Research (GS&R) to review is April 1, 2015, if you plan to graduate in May 2015. Do NOT wait until this date, submit sooner as the GS&R office may take longer to review your thesis. Therefore, your ‘rough draft’ of the thesis is due to the Thesis Committee Members and Course Instructor is no later than Wednesday March 18, 2015.
Required Paperwork for the Completion of Thesis/Project Course:
- Oral Presentation and Grade Form to be submitted to Dr. Fred Barez, Course Instructor by the Committee Chair by Friday 5/20/2015.
- An approved (signed) copy of the Final Thesis or Project Report received by Dr. Fred Barez, Course Instructor by Thursday 12/21/2015.

Required Paperwork for Graduation (if ME 295B or ME 299, second semester, is your last course towards your completing your MSME degree):
- Culminating Experience Form will be issued by Dr. Raghu Agarwal following the receipt of a printed ‘bound’ copy of the Final Report by Dr. Fred Barez, Course Instructor.

ME 295A/ME 295B/ME 299 Course Goals
In ME 295AB/299 the students will learn how to:
1. Conduction engineering research
2. Apply mathematics appropriate for graduate level engineering research
   Apply scientific principles and practices appropriate for graduate level engineering research
3. Apply engineering fundamentals appropriate for graduate level engineering research
4. Apply modern design, analysis, and experimental tools to the chosen research problem
   Communicate the results of engineering research effectively in written form (final report) and in oral presentations

Student Learning Objectives
At the end of the course, the student who has mastered the course material will be able to:
1. Conduct a literature review on a topic of engineering research using a full range of information sources
2. Summarize findings and draw valid conclusions from engineering research
3. Present the results of research work in front of peers following accepted presentation methods
4. Document the results of research work in a detailed engineering report following accepted format and style guidelines

University Policies and Academic Calendar
Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester’s Catalog Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic calendar web page located at http://www.sjsu.edu/academic_programs/calendars/academic_calendar/.
The Late Drop Policy is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. Students should be aware of the current deadlines and penalties for dropping classes.
University Policies
Campus Policy in Compliance with the American Disabilities Act
If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the Disability Resource Center (DRC) at http://www.drc.sjsu.edu/ to establish a record of their disability.

Academic Integrity
Students in this course are expected to maintain high ethical standards in all matters pertaining to the course, including, but not limited to, course assignments, presentations, writing, laboratory work, treatment of class members, and behavior in class. Cheating and plagiarism are violations of the SJSU Policy on Academic Integrity (S04-12) and will not be tolerated in the class. Students are expected to have read the Policy, which is available at: http://www2.sjsu.edu/senate/S04-12.pdf

Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sa.sjsu.edu/judicial_affairs/index.html.

Plagiarism is defined as:

1) the use of another person's original (not common-knowledge) work without acknowledging its source.

Thus plagiarism includes, but is not limited to:

- Copying in whole or in part, a picture, diagram, graph, figure, etc. and using it in your work without citing its source
- Using exact words or unique phrases from somewhere without acknowledgement
- Putting your name on a report, homework, or other assignment that was done by someone else

In this class, particularly in writing your project/thesis report, you must be especially vigilant to avoid plagiarizing the work of others. You must properly and completely cite any and all information that you include in your report/thesis that is not common knowledge or does not originate from you. Many students are unaware that copying an image or a block of text from the Internet or other electronic resources, for example, and inserting it into their work without citation constitutes plagiarism.

Students are expected to familiarize themselves with how to avoid plagiarism. Several helpful resources can be found at:

http://www.stanford.edu/dept/vpsa/judicialaffairs/students/plagiarism.sources.htm

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