Mechanical Engineering Department

Course: Mechanical Engineering Project I
Course: Mechanical Engineering Project II
Course: ME Master’s Thesis

Course Code: 41975
Course Code: 41915
Course Code: 40446

Semester: Fall 2015

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


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

Instructor/Course: Dr. Fred Barez, E310K, 408-924-4298, fred.barez@sjissu.edu
Coordinator

Office Hours: Mondays 18:00 – 19:00

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

Grading: CR or NC only.

Expectations: 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 enroll in this class.
- provide a one-page progress summary by 10/19/2015
- provide a ‘rough’ draft of their project/thesis by 11/23/2015
- make an end of the semester presentation on 12/9/2015
- provide an end of the semester report 12/18/2015

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.
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
Important Dates:

- Last Day to Drop, Tuesday 09/01/2015
- Last Day to Add, Wednesday 09/09/2015
- One Page Progress Summary approved by the Committee Chair and turned in to the Dr. Fred Barez, Monday 10/19/2015
  Instructor/Course Coordinator
- ‘Rough Draft’ due to Committee Members, Monday 11/23/2015
  and Dr. Fred Barez, Instructor/Course Coordinator,
- End of the Semester Presentation Day, Wednesday 12/08/2015
- Approved Final Report Due to Dr. Fred Barez, Tuesday 12/18/2015
  Instructor/Course Coordinator.
  (Requires Committee Chair Approval Only)

ME 295B students are expected to complete their study during this period including submission of the approved Final Report to the Instructor/Course Coordinator, Dr. Fred Barez, 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 October 30, 2015 if you plan to graduate in December 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 Instructor/Course Coordinator is no later than **Friday October 2, 2015.**

**Required Paperwork for the Completion of Thesis/Project Course:**

- Oral Presentation and Grade Form to be submitted to Dr. Fred Barez, by the Committee Chair by Friday 12/18/2015.
- An approved (signed) copy of the Final Thesis or Project Report received by Dr. Fred Barez, by Friday 12/18/2015.

**Required Paperwork for Graduation** (if ME 295B or ME 299, second semester, is your last course towards your completing the 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.

**ME 295A/ME 295B/ME 299 Course Goals**

In ME 295AB/299 the students will learn how to:

1. Conduct engineering research
2. Apply mathematics appropriate for graduate level engineering research
   Apply scientific principles and practices appropriate for graduate level engineering research