San José State University
Charles W. Davidson College of Engineering
Aerospace Engineering
AE 295B – Aerospace Engineering Project II – Spring 2017

Course and Contact Information

Instructor-of-Record: Dr. Nikos J. Mourtos

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Office Hours: TR 11 am – 1 pm and 4 – 6 pm

Class Days/Time: Fridays 16:30 - 19:15

Classroom: Engr. 164

Prerequisites: Letter grade of "B" or better in AE295A

Course Description

This is a second-semester Master's Project course. Students perform graduate level research and/or design and/or development, involving aerospace systems or components in consultation with an aerospace engineering faculty member. Students are encouraged to submit and present their work at student and professional conferences.

Course Goals

1. Apply contemporary professional and lifelong learning skills to access and process project related information effectively and efficiently from a variety of sources.
2. Acquire the expertise necessary to work in the analysis and design of aerospace systems with possible specialization in one of the following 2 areas: (a) aircraft design, (b) space transportation and exploration.
3. Improve verbal and written communication skills, including the ability to write aerospace engineering technical reports and conference papers.
4. Improve ability to perform research and work independently to solve open-ended aerospace engineering problems.

Course Learning Outcomes (CLO)

Upon completion of this course students will be able to:

1. Conduct a literature review on an aerospace engineering topic using appropriate sources from the worldwide web, the library, professional journals, conference papers, and technical reports.
2. Use the results of the literature review to define appropriate project objectives.
3. Apply graduate level mathematics, science, and engineering principles to carry out the project using analytical and/or experimental, and/or computational methods.
4. Document the project results in a detailed engineering report following the AIAA (American Institute for Aeronautics and Astronautics) format and guidelines.

Required Text: None

Course Requirements and Assignments

Spring Semester	Assignment
February 28	4th written report due (Chapter 4; chapters 1-3 completed in AE295A)
March 31	5th written report due (Chapter 5)
April 30	Draft of final written report due to advisor for review
May 15	Final written report (soft copy, Word document) with corrections, due to advisor and the Instructor-of-Record

Grading Policy

Grades are determined by the thesis / project advisor and committee members based on the criteria shown on the evaluation form included below. However, a formal written report following the posted AE guidelines or a published paper, must be submitted to the Instructor-of-Record before a grade can be assigned.

MSAE Thesis / Project Evaluation Form

Title					
Name				Semester –	
Advisor					
Max Possible Score = 100		Max Possible	***Average score***	Project Advisor	Other Evaluator
1	Application of AE science (aerodynamics, propulsion, flight mechanics, stability & control, aerospace structures & materials, etc.) and/or aerospace vehicle design, appropriate for graduate level	20			
2	Use of modern tools (computational or experimental)	10			
3	Appropriate literature search (# and appropriateness of references cited)	10			
4	Understanding of the cited literature (summary of previous work)	10			
5	In-depth analysis and / or design of an AE system	20			
6	Correct language and terminology	20			
7	Appropriate use of graphs and tables	10			
	Total Score	***100***			

Grade Distribution/Overall Score:

Total Score	Letter Grade
90 - 100	A (Excellent)
80 - 89	B (Good)
0 - 79	F (Not Acceptable)

AE Department Policies

Can be found at <http://www.sjsu.edu/ae/programs/policies/>

University Policies

Can be found at <http://info.sjsu.edu/static/catalog/policies.html>