UF students are bound by The Honor Pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." See: http://www.dso.ufl.edu/sccr/process/studentconduct-honor-code/ for violations and sanctions. You are obligated to report any academic misconduct to appropriate personnel. Please see me or our TA with any question on this.

# CLASS ATTENDANCE & MAKE UP POLICY

Students are expected to attend all meetings. There will be no make-up or rescheduling of exams (presentations) to other times.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <u>https://catalog.ufl.edu/ugrad/current/regulations/info/att</u> endance.aspx.

### STUDENTS WITH DISABILITIES

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. **Students with disabilities should follow this procedure as early as possible in the semester. In other words: immediately at the beginning.** 

### ONLINE STUDENTS COURSE EVALUATION

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <u>https://evaluations.ufl.edu/results/</u>.

# CLASS DEMEANOR EXPECTED BY THE INSTRUCTOR

I have little tolerance for students who are repeatedly late to class, cell phone ringing, text message beeps, and any behavior that may be distracting both students and instructor.

Offenders will be asked to leave the classroom, and the lecture will not resume until they comply. If they do not comply, the lecture will be given for granted and the instructor will move on. Also, I will not be eating while teaching (obviously!), and I expect you not to eat in class. If you have read all this, please go to the board silently and write the name of your favorite aircraft. Say nothing.

#### CONTACT INFORMATION FOR THE COUNSELING AND WELLNESS CENTER

If you are experiencing undue stress, anxiety, depression or have concerns about a fellow classmate **<u>please reach out for help</u>**.

Counseling services may be reached at (352) 392-1575 or on line at http://www.counseling.ufl.edu/cwc/Default.aspx,;

For more serious situations please call University

# EAS 4710 : AEROSPACE DESIGN 2 SPRING 2020



#### Why did YOU choose Aerospace Engineering?

If you chose because of a love of things that fly, this class is for you.

#### Mr. Michael Generale Instructor

EMAIL: <u>mgenerale@ufl.edu</u>

Office: MAE-B 239

Office Hours: T 14:00 - 17:00

Other times by appointment

TA: Jacob Reichhardt <u>reichhardt@ufl.edu</u>

CLASS ROOM:	CE 237
CLASS TIMES:	TU: 11:45 - 13:40
	TH: 11:45 - 12:35



#### **COURSE PRE-REQUISITES**

EAS 4101 and EAS 4400 with at least D grade. Working knowledge of MATLAB and Solidworks is required.

# COURSE DESCRIPTION

This communication, presentation, and writing intensive course introduces all elements of the aircraft design process. You will be given a Request For Proposal and your task is to design an aircraft to meet the given requirements by drawing on your background in aerospace engineering science, machine design, and manufacturing methods.

Topics include:

- Problem definition
- Requirement analysis
- Design specifications
- Concept development
- Reliability
- Consideration of alternative solutions
- Materials considerations
- Engineering prototyping
- Mission analysis
- Costs

# TEXTS / SOFTWARE

You must have access to MATLAB and Solidworks. Scheduling software such as Microsoft Project (PC) or Merlin (Mac) will be helpful. No books are required.

# COURSE OBJECTIVES

By the end of this course, you should be able to do the following:

- Prepare technical documents for an aerospace industry audience in a timely fashion.
- Develop and give technical presentations, to an aerospace industry audience in a timely fashion.
- Work in team environment to develop design alternatives, and select the best aircraft design.
- Find and apply technical knowledge to solve problems using a systems engineering approach.
- Understand the concepts of Systems Engineering and
  Project Management



# **GRADING RUBRIC / POLICY**

There are no planned quizzes. The Midterm, referred to the Preliminary Design Review (PDR), will be a **group presentation for a Group grade.** PDR is scheduled for during the Week of 18 FEB, 2020 in CE237.

The PDR is worth 20% of the final grade ALL PDR PRESENTATIONS ARE TO BE UPLOADED TO CANVAS NO LATER THAN 11:59PM ON THURSDAY 13 FEB (instructions for upload file path will be discussed in class) <u>NO EXCEPTIONS</u>. THE GROUP WILL BE PENALIZED ONE LETTER The Final, referred to as the Critical Design Review (CDR) is also **a group presentation for a Group grade.** CDR is scheduled for the Week of November 18th, 2019 in <u>MAE-</u><u>B</u> 237.

The CDR is worth 20% of the final grade. ALL CDR PRESENTATIONS ARE TO BE UPLOADED TO CANVAS BY 11:59PM ON 09 APR NO EXCEPTIONS. THE GROUP WILL BE PENALIZED ONE LETTER GRADE IF THEIR PRESENTATION IS LATE.

A final report worth <u>40% of the final grade</u>, in the format for the AIAA Student Design Competition. Each team will create a single final report for grading. **ALL REPORTS AND INDIVIDUAL TEAM MEMBER EVALUATIONS ARE TO BE UPLOADED TO CANVAS BY 11:59PM ON 23 APR <u>NO EXCEPTIONS</u>. <u>THE GROUP WILL BE</u> <u>PENALIZED ONE LETTER GRADE IF THEIR</u> <u>PRESENTATION IS LATE.</u>** 

The remaining 20% of the individual grade is based on individual class participation and peer review input.

#### Grading for this course is as follows:

A: 94 to 100	C: 65 to 69.99
A-: 90 to 93.99	C-: 60 to 64.99
B+: 85 to 89.99	D+: 55 to 59.99
B: 80 to 84.99	D: 50 to 54.99
B-: 75 to 79.99	D-: 45 to 49.99
C+: 70 to 74.99	E: Less than 45

There is zero tolerance for cheating. Your work must be completed completely independently. If anyone is caught having worked with individuals not in their group or class, or plagiarizing the penalty is an automatic failure of the course. Cheating breaks the mutual trust between

