



AIRCRAFT DESIGN



ASEN 4138

Fall Semester 2019

Class Times

Section Number

- **Lecture Sections:** M & W 8:30am – 9:20am (010)
All lectures in AERO 114
- **Laboratory Sections:** Tu 10:30am – 12:20pm AERO N 100 (012)
Th 10:30am – 12:20pm AERO N 100 (013)
F 8:30am – 10:20am AERO N 100 (011)

Prerequisites

- ASEN 3128, Aircraft Dynamics

Textbook

- Raymer, Daniel P., *Aircraft Design: A Conceptual Approach, 6th Edition*, AIAA Education Series, Reston, Virginia, 2018.

References

- See Canvas document - these books are available in the Engineering Library.

Instructor

- Dr. Donna Gerren (Dr. G)
- E-mail address: donna.gerren@colorado.edu
- Office: N 203
- Office phone: (303)735-4870
- Office hours: Tu & Th 1:30 – 3:30pm
F 11am - noon
Also available during lab sessions or by appointment.

Grading

- Class is worth 1,000 points total
- Homework - none
- Exams – none
- Four written design reports - each report worth 225 points (90% of class grade) – peer evaluations by myself, your TA, and your design partner (combined) can affect up to +/- 5% of each of your report grades.
- Oral presentation at the end of the semester - 100 points (10% of class grade). Again, peer evaluations by myself, your TA, and your design partner (combined) can affect up to +/- 5% of your presentation grade.
- Attendance for final class presentations is required: 5 points will be docked from your presentation grade for each day of presentation nonattendance unless excused. This has resulted in a reduced semester grade.
- **NOTE:** Some presentations will take place during this course's final exam time, Monday, December 16, 7:30 – 10:00pm.

General Comments

- Keep cell phones silent during class!
- The following are **tentative** due dates for each report:
 - Design Report 1 Monday, September 30 due at beginning of class
 - Design Report 2: Wednesday, October 30 due at beginning of class
 - Design Report 3: Friday, November 22 due at 5pm
 - Design Report 4: Wednesday, December 17 due at noon
- Unexcused late reports WILL BE penalized 5 points for each late day.
- All reports must be prepared with a word processor and adhere to the design report requirements e-mail handout. All drawings must be done using a software program – no hand sketches. Points will be taken off unprofessional reports, even if the technical content is correct.
- **ADVICE:** Get started on your first report right away - September 30th will be here before you know it. Get started on the next report as soon as you've handed in the previous report. Keep a rough draft of the report just handed in as it takes a while to grade and return them to you – you may need some calculations or values from that report to continue work on your design. **Back up your files regularly and have several backup or paper copies of your Advanced Aircraft Analysis (AAA) data.**