ASEN 3801: Aerospace Vehicle Dynamics and Control Lab Spring 2024 Syllabus

Lab Schedule:

• Sec i -001: Wednesdays 8:30am-10:20am in AERO N100

• Sec i -002: Fridays 8:30am-10:20am in AERO 141

Sec i -003: Fridays 10:35am-12:25pm in AERO 141

Instructors

Second half of semester: Prof. Melvin Rafi **E ail:** melvin.rafi@colorado.edu

Teaching Assistants

Tim Behrer E ail: Timothy.Behrer@colorado.edu Sec i : TBD

Dakota Harris **E ail:** Dakota.Harris@colorado.edu **Sec i :** TBD

Carson Kohlbrenner E ail: Carson.Kohlbrenner@colorado.edu Sec i : TBD

Rashikha Jagula **E ail:** Rashikha Jagula@colorado.edu **Sec i :** TBD

Course Description

O e ie:

This course emphasizes applications of engineering dynamics and control principles for modeling, simulating, designing, analyzing, and evaluating aerospace vehicle systems. Over several labs, there is experimental and computational focus on problems in aircraft flight stabilization and spacecraft attitude control.

| To complete these assignments, students must have access to a computer, basic | |
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Logistics

c e Web i e: canvas.colorado.edu

group work, there may be one of two consequences, depending on the severity: 1) the student's individual score will be less than the rest of the group's score for the lab, or 2) the team will be re-arranged, and the non-participating student might have to complete the assignment on their own. The instructors will decide the appropriate course of action, including the value of any lab score deductions. A lab group may also report an absent team member prior to the lab report deadline by emailing both the instructors and cc-ing all members of the group.

E e i e e : In the rare case of an extenuating circumstance, a lab group may submit a request for an extension by no later than 10am MT the business day before the deadline. The instructors will consider requests for extensions only for excusable reasons. Sending an extension request does not guarantee that it will be granted.

La e a ig e will not be accepted without prior approval by an instructor or extenuating circumstances. Any groups that do not submit a lab report on time will receive a grade of zero for that specific lab.

Reg ade e e must be made within 1 week of the graded lab reports being returned. These requests must be made in writing via Gradescope with a clear description of the suspected grading error and the relevant rubric item/s. Regrade requests will not be accepted verbally.

There is no **Fi al E a** for this course.

Office h are scheduled to provide additional opportunities for student questions. For office hours, the TAs will participate in the department Study Hall. The instructors will not hold office hours. You are strongly encouraged to ask questions during your assigned lab section.

- **S d Hall:** To improve academic support, provide peer mentorship, and build community for undergraduate students, the Aerospace department launched the Undergraduate Study Hall program. During the Study Hall, course TAs and Engineering Fellows will be available to provide support.
- **Q e i :** For questions about technical concepts or the labs, you may use one of the following options, in order of preference:
 - 1. During your assigned lab section
 - 2. During the Study Hall
 - 3. The optional Slack page
 - 4. Emailing the teaching assistants assigned to your lab section

Students may email the instructors questions regarding individual, logistical, or administrative issues. Do not expect an immediate response; the instructional team will respond as soon as they can within reasonable business hours.

Course Grading Policy

The final course percentage grade will be calculated for each individual student as:

Percentage grade =

Classroom Behavior

Students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote, or online. Failure to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation, or political philosophy.

For more information, see the <u>classroom behavior policy</u>, the <u>Student Code of Conduct</u>, and the Office of Institutional Equity and Compliance.

Requirements for Infectious Disease

Members of the CU Boulder community and visitors to campus must follow university, department, and building health and safety requirements and all applicable campus policies and public health guidelines to reduce the risk of spreading infectious diseases. If public health conditions require, the university may also invoke related requirements for student conduct and disability accommodation that will apply to this class.

If you feel ill and think you might have COVID-19 or if you have tested positive for COVID-19, please stay home and follow the <u>guidance of the Centers for Disease Control and Prevention</u> (CDC) for isolation and testing. If you have been in close contact with someone who has COVID-19 but do not have any symptoms and have not tested positive for COVID-19, you do not need to stay home but should follow the <u>guidance</u> of the CDC for masking and testing.

Accommodation for Disabilities, Temporary Medical Conditions, and Medical Isolation

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the <u>Disability Services website</u>. Contact Disability Services at 303-492-8671 or <u>dsinfo@colorado.edu</u> for further assistance. If you have a temporary medical condition, see <u>Temporary Medical Conditions</u> on the <u>Disability Services website</u>.

Please know that faculty and graduate instructors must inform OIEC when they are made aware of incidents related to these policies regardless of when or where something occurred. This is to ensure that individuals impacted receive outreach from OIEC about resolution options and support resources. To learn more about reporting and support for a variety of concerns, visit the Don't Ignore It page.

Religious Observances

Campus policy requires faculty to provide reasonable accommodations for students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please communicate the need for a religious accommodation in a timely manner. In this class, please provid 0 rd4P 0.(d4P 0. f 0 0 0 scq) -1] TJ ET T1 31T -0.001 Tc 46 0 0 46 bo 1 (uni) -1(onT