

ASEN 3802: Aerospace Sciences Laboratory II

Learning Goals: A student who successfully completes this course will:

1. Have an operational understanding of experimental measurement techniques used in aerodynamics, structural mechanics, thermodynamics, and heat transfer,
2. Be capable of designing and analyzing experiments to study physical phenomena, measure physical properties, and assess performance of aerospace designs,
3. Be capable of carrying out experiments,
4. Be capable of processing and critically analyzing experimental data, including characterizing and propagating uncertainties,
5. Have a basic understanding of the verification and validation process, and
6. Be capable of validating models using experimental data.

The course will also reinforce students' understanding of fundamental concepts covered in ASEN 3711 (Aerodynamics), ASEN 3712 (Structures), and ASEN 3713 (Thermodynamics and Heat Transfer).

Required Text: None.

(While there are no required textbooks for this course, the textbooks associated with ASEN 3711, ASEN 3712, and ASEN 3713 are highly recommended as references for the material covered in the laboratory assignments, please see Supplemental References below.)

laboratory material (e.g. correctness of solutions, debugging code, etc.) over email, instead these questions and challenges should be resolved either during the in-person laboratory periods or at the consolidated Aerospace Study Hall periods.

to indicate your level of competency compared to the standard that we set. Do you meet the minimum level of competency? Do you exceed the minimum? Are you below the minimum? The answers to these questions should be indicated by your final grade.

The final grade indicates your readiness to continue to the next level of courses. Meeting the minimum requirements indicates that you are prepared to continue at least at the minimum level required for the next in the sequence of courses. Exceeding the minimum means you are ready to enter the next course and that you have mastery of material beyond the minimum, that is, you show some level of proficiency.

Regrading: All regrade requests must be made within two weeks of receiving the grade for an assignment. These requests must be made in writing (i.e. via email) to the appropriate course teaching assistant/facilitator with the appropriate course instructor copied. Regrade requests received verbally or without the instructor copied will not be considered. Two weeks of receiving the grade for an assignment.

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 [classroom behavior policy](#), the [Student Code of Conduct](#), and the [Office of Institutional Equity and Compliance](#).

Requirements for Infectious Diseases: Members of the CU Boulder community and visitors to campus must follow university, department, and building health and safety requirements and all public health orders to reduce the risk of spreading infectious diseases.

The CU Boulder campus is currently mask optional. However, if masks are again required in classrooms, students who fail to adhere to masking requirements will be asked to leave class. Students who do not leave class when asked or who refuse to comply with these requirements will be referred to Student Conduct & Conflict Resolution. Students who require accommodation because a disability prevents them from fulfilling safety measures related to infectious disease will be asked to follow the steps in the "Accommodation for Disabilities" statement on this syllabus.

For those who feel ill and think you might have COVID-19 or if you have tested positive for COVID-19, please stay home and follow the [further guidance of the Public Health Office](#). For those who 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.

Accommodation for Disabilities, Temporary Medical Conditions, and Medical Isolation:

[Disability Services](#) determines accommodations based on documented disabilities in the academic environment. If you qualify for accommodations because of a disability, submit your accommodation letter from Disability Services to your faculty member in a timely manner so your needs can be addressed. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance.

If you have a temporary medical condition or required medical isolation for which you require accommodation, please notify the instructor as soon as possible so that appropriate accommodations can be made. If you are sick or require isolation please notify the instructor of your absence from in-person activities and continue in a completely remote mode, as you are able, until you are allowed or able to return to campus. Please note that for health privacy reasons you are not required to disclose to the instructor the nature of your illness or condition, however you are welcome to share information you feel necessary to protect the health and safety of others within the course. Also see [Temporary Medical Conditions](#) on the Disability Services website.

Preferred Student Names and Pronouns: CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed

