

ASEN 2002

Introduction to Thermodynamics and Aerodynamics

Fall 2021

Lecture: Tuesday/Thursday in Aero 120

Section 100: 02:50 PM - 04:05 PM

Section 200: 04:25 PM - 05:40 PM

Lab:

TA/TF/LA:

Teaching Assistants	TBD	
Teaching Fellows	TBD	
Lab Assistants	TBD	

Class Canvas Portal: <https://canvas.colorado.edu/courses/75109>

Texts:

1. Cengel, Fundamentals of Thermal-Fluid Sciences, 6th Ed.(hardcopy or electronic version)
2. Anderson, Introduction to Flight, 9th Ed. (hardcopy or electronic version)

Prerequisites: APPM 1350/1360, PHYS 1110 or equivalent

Corequisite: APPM 2350 or equivalent, ASEN 2012

Required Equipment: Safety glasses/goggles (if in-person lab participation). Laboratory notebooks (physical or electronic) are expected for tracking assignments and documenting lab progress, and may be spot checked periodically (note that lab notebooks will be required for Sr. Projects and promote good professional practice, so use this opportunity to establish good engineering habits, whether in person or remote).

Course Objectives: (Ob)-5(320.09 Tm0 g 320.4*127.1)JTET1 T99 594.9n92 reW* nBT

Grade Breakdown: The two principal lecture / lab elements of the course, *thermodynamics and aerodynamics*, are equally weighted. Your final grade is determined according to the following percentage breakdown.

Type	Description	Percentage
Individual	Quizzes (Lab & Lecture)	30% (Total)
	Breakdown of quizzes and their weights below	
	<i>3x lecture quizzes</i>	
	<i>2x lab quizzes</i>	<i>6% each</i>
	2 x Exams (Total)	30% (Total)
	Breakdown of exams and their weights below	

Thermo Comprehensive

15%

IMPORTANT: The course grade is primarily dependent on individual measures of competency, i.e. exams and quizzes. The other course assignments are designed to enrich the learning experience and to enhance individual performance, not to substitute for sub-standard individual competency. Accordingly, group assignment grades (i.e., labs) are only incorporated into the final grade when the individual grade (made up of quizzes and exams) is a C or better. In other words, if your individual score average is below a C, then the group-based grade fraction will not be averaged into your final grade, which will now be based solely on your individual score. This policy makes it important to use the group assignments as opportunities to enhance your own learning and not simply rely on your team members to 'divide

to promote fairness in assigning group grades where individual contributions to

- Experimental laboratory exercises are more complex than the homework and require special equipment (such as the wind tunnel). You will work in teams to collect and analyze the data, as well as deliver the experimental laboratory assessment.
 - Exams and quizzes provide a gauge to determine what you have learned individually.
 - Design projects help you to learn how to synthesize the basic concepts, methods, and tools presented in the course curriculum by combining theory and practice. The team-oriented lab approach will give you experience in the benefits and challenges of working and cooperating in groups, as is typical in this industry.
10. ***Safety is priority #1 in the in-person laboratory.*** Anyone violating rules of safe conduct

SEXUAL MISCONDUCT, DISCRIMINATION, HARASSMENT AND/OR RELATED RETALIATION

The University of Colorado Boulder (CU Boulder) is committed to fostering an inclusive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, or protected-class discrimination or harassment by or against members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or email [_____](#). Information about OIEC, university policies, [_____](#), and the campus resources can be found on the [_____](#)

Please know that faculty and graduate instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, dating and domestic violence, stalking, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about their rights, support resources, and reporting options.

RELIGIOUS HOLIDAYS

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, please identify any religious obligation conflicts upon reviewing the schedule during the first two weeks of class and notify the instructor so that arrangements can be made. Requests made after this period will be considered on a case by case basis.

See the [_____](#) for full details.