

ASEN 2003: I D a

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Lectures:

Section 100: Monday and Wednesday 12:50pm-2.05pm in AERO 120

Section 200: Monday and Wednesday 2:20pm-3.35pm in AERO 120

Labs:

Sec.	Day	Start	End	Room
301	TTH	12:40 PM	2:30 PM	AERO 141
302	TTH	2:45 PM	4:35 PM	AERO 141

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Office Location: AERO 150D

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study of simple motions one step further by introducing the fundamental concepts of vibrations and control into this course. Vibration analysis is critical to aerospace vehicle design, and as engineers we must both understand the motion of vehicles and learn how to modify the vehicle to suit mission requirements. This course will give you a flavor of these advanced topics, laying the groundwork for more advanced studies in your junior and senior years.

We will cover the following topics:

- 1.

Material and concepts are introduced, and proficiency is evaluated using several mechanisms throughout the course:

Reading Assignments: The primary means for conveying factual information, techniques, and

The labs are designed so that you **should** expect to have to try out several different approaches or ideas, puzzle over and discuss surprising results, debug and adjust models, and ultimately demonstrate a clear understanding of the material.

Assignments will generally be due at a specific time in the evening on the specified day to accommodate students who need a flexible schedule due to their current location, work, care, or other commitments.

All assignments are to be submitted in Gradescope (be sure to include team members for group assignments).

Once you submit your assignment electronically, please double check that the file has uploaded correctly, is readable and is not corrupted; it is your responsibility to ensure it is uploaded correctly and we cannot grade a homework if we cannot open the file.

Late homework will not be accepted, but the lowest two homework grades will be dropped (see below).

Solutions will be posted on Canvas after the due date.

Collaboration vs copying/plagiarism

Collaboration is permitted on homework. You may discuss the means and methods for

Format

Homework should be neatly handwritten with a new page for each problem. Typed homework is acceptable if you prefer it but is definitely not required or encouraged. If you write a MATLAB script or function to solve the problems, the code must be included at the end of your submission.

Always submit work with a professional appearance. Neatness, clarity, and completeness count. Very messy work will not be graded, receiving a score of zero. Vector notation must be used when appropriate. Numerical values must include units and a meaningful number of significant digits. Final answers must be indicated with an arrow, underline, or box.

Grading

For grading purposes, homework is considered part of the group grade and only contributes to the total grade when the individual work is C or better.

Homework is graded partially based on completion of all assigned problems (approx. 50%) and partially based on the quality/accuracy of a subset of the assigned problems (approx. 50%). To receive credit for completion, problems must be presented using the full appropriate problem solving approach. The problems graded for accuracy will be

Attendance: Attendance to lecture on Zoom or in-person is expected, but not required. Participation in laboratory sessions (either in-person or remote) is mandatory. In-class assignments may be given at any time and students are expected to come to class prepared to work with their team.

Exams: Exam dates are provided on the class schedule. If you cannot sit an exam due to an unavoidable schedule conflict, notify the instructor at least one week prior to the exam date to

To receive a course grade of C or better, a student must earn a C or better on the individual grade in this class. A C is the minimum grade that allows you to proceed to a course for which this is a prerequisite. If the weighted exam and final score is below a C, the student's individual score will be assigned as their final grade in the course. In this case the group assignments will not contribute to the final grade. See the grading table below for specific weightings.

The final grade in this course will be calculated using the following rubric:

Type	Description	Percentage
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Individual Grade

Assignments are graded to an absolute standard designed to indicate your level of competency in the course material. Minor adjustments may be made in the assignment of final grades, but there is a limited amount of “curving” in the course. The final grade indicates your readiness to continue to the next level in the curriculum. The AES faculty have set these standards based on our education, experience, interactions with industry, government laboratories, others in academe, and according to the criteria established by the ABET accreditation board.

The course grade is primarily dependent on individual measures of competency, i.e. exams. The other course assignments are designed to enrich the learning experience, build additional skills, and enhance individual performance, not to substitute for sub-standard individual competency. Accordingly, group assignment grades are only incorporated into the final grade when the individual grade is a C or better. In other words, if your individual average is below a C, the group-based grade fraction will not be averaged into your final grade, which will then be based solely on your individual score. This policy makes it important to use the group assignments to enhance your own learning. If the work in the assignment is split up among group members, be sure that the learning is not also split up, but is shared among the whole group. Homework is included in the group grade because collaboration is encouraged; it does not mean that copying is permitted on homework.

Both students and faculty are responsible for maintaining an appropriate learning environment

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 on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code academic integrity policy. Violations of the Honor Code may include, but are not limited to: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (honor@colorado.edu; 303-492-5550). Students found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found on the [Honor Code website](#).

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CU Boulder is committed to fostering an inclusive and welcoming learning, working, and living environment. The university 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

Campus po