

Instructor: Adam Norris
Office Hours: TBA
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Lectures: MWF from 14:30–15:20 in ECCR 257

Important Dates: (all need to be updated)

Aug 26	Mon	Classes begin
Sep 02	Mon	Labor Day, no classes
Nov 25-29	Mon–Fri	Fall Break, no classes
Dec 12	Thr	Last day of lectures
Dec 16	Mon	Final exam day, 13:30–16:00

Grading Distribution:

70% Homework
10% Midterm*
10% Final*
10% Exhibiting signs of life or feigning interest during the semester*

Exams: Exams may be take-home and cumulative in nature.*

Homework Policy: Homework problems will require you to fill in details from class discussions, or further explore a topic outside of class. Problems assigned during any given week will be due the following Wednesday. The solutions should include the following:

- Clear, brief restatement of the problem or question.
- Statement of important assumptions.
- Neat, detailed, step-by-step solution including sufficient comments to make the solution “read” well.
- Statement of the significant physics of the problem. What does the answer mean? Is it reasonable? If you don’t know, say so, but don’t bluff.

You are encouraged to work together on the assignments, however, the major portion should be done on your own. In all cases, your submission should demonstrate that *you* understand the problem and its solution.

Course outline: Given time, we will cover the following topics:

Dimensional analysis
Basics of linear asymptotics
Basics of perturbation theory
Reynolds transport theorem
Orthogonality of functions
Special functions
Laplace transforms
Legendre transforms
Introduction to tensors

Academic honesty: Work on projects, homework, programming assignments etc., is generally done on an individual basis. I realize that students frequently help each other over hurdles while developing programs and solving problems, and I encourage this. However, using another person’s work or allowing another student to use your work, without proper attribution, will be considered a dishonest act. Violation of the CU Student Honor Code ([honorcode.colorado.edu](http://www.colorado.edu/honorcode)) or (<http://www.colorado.edu/policies/academic-integrity-policy>) will result in a final course grade of F and a report to the College of Engineering or Arts and Sciences, a copy of which will be placed in the student’s permanent file.

CU Boulder Required Syllabus Statements: We will follow the required syllabus statements of the CU Boulder campus. You can find the full list [here](#).

* Listen carefully on the first day of class.