

Required Materials

Textbook: **Physics for Scientists and Engineers** by Randall D. Knight (Pearson, 4th Ed.)

The schedule provided at the end of this document indicates the readings you must complete before each lecture. The reading quizzes and in-class participation will be based on these assigned readings.

Your first time reading the assigned material does not need to be highly detailed. Focus on the main concepts, read one or two examples, and browse quickly through any derivations. This first reading will be the assumed starting point for all lectures. Therefore, failing to complete the readings and associated reading quizzes will impair your ability to understand our lecture discussions.

The textbook also provides the conceptual questions and detailed problems that will be the subject of the weekly online homework, practical activities, and group quizzes. Please note that you will need an access code to MasteringPhysics, either through a bundled textbook or bought separately from the bookstore.

Automated Student Response System: **iClicker** or **iClicker+** by Macmillan

You will need a clicker to answer the in-class participation quizzes. To receive the participation mark you must register your clicker by Monday, September 18. Instructions are available on the course website.

Note that in order to receive this participation mark you must be present with your u u

Grade Components

Reading Quizzes (5%)

Before each Tuesday lecture and on MasteringPhysics you will be asked a set of questions from the assigned textbook readings for that week. You will have until 11:55 am on Tuesday to submit your answers. Each quiz is worth 5 points, and your final grade is the total sum of all quizzes up to a maximum of 50 points. Use the Class Schedule to prepare for the lectures and reading quizzes.

Participation (5%)

During each lecture we will work on clicker questions from the textbook readings and the lecture presentation. During each lecture 1 point can be earned by answering at least 75% of the questions asked. The total sum of all lecture points makes up your participation grade up to a maximum of 20 points. In addition, after each lecture one participation question will be selected for a performance bonus. An extra 1% will be awarded to those students that correctly answer 50% or more of the performance questions.

Online Homework (5%)

These will be a weekly set of questions posted on MasteringPhysics. The questions will be based on the previous week's textbook reading material and lecture discussions. Each homework is worth 10 points, and your final grade is the average of the best 10 results. A mix of conceptual questions and applied problem-solving exercises will be included. Do not spend more than two hours on each homework.

Practical Sessions (20%)

In these three-hour weekly sessions you will work in groups and discuss examples on the concepts introduced in your textbook readings and lecture presentations. Groups will apply these concepts and principles, in order to develop skills useful in scientific conceptual analysis and general problem-solving.

Final Examination (35%)

The final examination will be scheduled during the exam period of December 07 - 20 . Material for the final examination will include all the topics discussed in the assigned textbook readings, lecture presentations, online homework, and practical sessions. The final examination will be 3 hours long and the format includes multiple-choice questions as well as detailed problems. The only aids allowed are your non-programmable scientific calculator, and a handwritten, double-sided, and letter-sized aid sheet. Photocopies or computer printouts are not allowed.

Class Policies

Name and Student Number

Any work you hand in must clearly indicate your name and student number, this includes practical activities, formal reports, tests, and the final exam. Any work you submit that fails to meet this requirement will be penalized with a 10% deduction, provided we are able to identify the work as yours. If we are unable to identify the work as yours, a grade of zero will be awarded.

In-class Conduct

Class starts at 3:10 pm, and ends at 4:00 pm on Tuesday and 5:00 pm on Thursday. Late arrival or early departure from class is inappropriate and will negatively affect your participation grade.

Regarding anything that you want to use in the classroom: if you are not using it to perform a task specifically related to what we are doing in class at that very moment, you must put it away. This includes but is not limited to cell phones, laptop computers, tablets, and other electronic devices.

Do not bring food into the classroom as this creates unwanted distractions that will negatively affect the learning environment. Be considerate to your peers.

e-mail

