

SYLLABUS
Fall 2019
Physics 170 – General Physics I

COURSE TIME: MWF 11:30 –12:20

CREDIT: 3 semester hours

LOCATION: PSB 217

INSTRUCTOR: Dr. Sara Petty

OFFICE: Watanabe 410

EMAIL: pettys@hawaii.edu

OFFICE HOURS: MWF 3 – 4:00 pm, or by appointment.

TA's: Each Recitation group has an assigned TA. Make sure that you go to the correct session. TAs are available during their office hours to provide additional help.

TEXTBOOK: Mastering Physics for Young & Freedman's [University Physics with Modern Physics 15th edition](#). See below for accessing the Mastering Physics Interactive Digital Access Program (IDAP).

COURSE DESCRIPTION: This course is the first half of a two-semester introduction to the fundamentals of physics, and will cover calculus-based mechanics of particles and rigid bodies: kinematics, dynamics, gravitation, energy, momentum, rotation, fluids, oscillations, and waves. Lectures and problems will regularly use the mathematical tools of calculus, algebra, geometry, trigonometry, and vectors.

PREREQUISITE: A successful completion of MATH 242 (or concurrent) or MATH 252A (or concurrent). MATH 216 may be substituted with consent.

CLASS-ID: Include your class ID on all assignments. You will also be asked to enter your class ID for the Mastering Physics system.

ONLINE COURSE MATERIAL ACCESS

LAULIMA: Laulima has been set-up for this course (<https://laulima.hawaii.edu>). You will receive announcements, documents, and additional resources.

MASTERING PHYSICS: The digital access for the course is being delivered through our bookstore's **Interactive Digital Access Program (IDAP)**. The cost of your digital materials will automatically be charged to your student account at a deeply discounted price. You are responsible for paying for charges applied to your student account.

To access your course materials:

1. Go to www.pearsonmylabandmastering.com
2. Register with our specific course ID: **petty66156**
3. Use our course specific access code: **DSCKUN-FONDA-VETCH-BLOBS-CONTO-VIRES**

If you have issues accessing the course materials, visit Pearson's tech support page at <https://support.pearson.com/getsupport/s/>. Either search for an immediate answer or choose "Contact Us" in the top right corner to chat with a tech support team member.

If you decide to opt-out of IDAP and lose access to the required digital course materials, please do one of the following:

1. Click the "Opt-Out" button in the left-hand navigation bar of your Laulima course to submit your request, or
2. Choose "Opt-Out" in this link <https://www.uhbooks.hawaii.edu/idap>

If you opt-out before the deadline, the IDAP Rental Charge will be refunded to your MyUH account. By opting-out you will lose access to the required course materials. If you have any questions about IDAP or this charge to your student account, contact the bookstore.

OTHER MATERIALS

SCIENTIFIC CALCULATOR: Needs to have scientific notation, trigonometric functions, exponents, & logarithms.

- Bring calculator to exams (necessary!) and lectures (needed for occasional in-class questions).
- Smart phones, tablets, computers, or similar devices are NOT permitted during exams!

ELECTRONIC COPIES: handouts, paper homework assignments, solutions, sample exams, and other course materials will be available through Mastering Physics or the Laulima sites for this course.

Announcements will be made each class. This includes due dates, updates to the course schedule, where to find resources, and additional practice materials. If you do not attend class, it is your responsibility to get this information from a classmate.

GRADING

Homework 20%
Recitation 10%
In-class Quizzes 10%

Midterms 20%
Final Exam 40%

Homework (20% of course grade) – weekly homework will be set on Mastering Physics, starting in week 2. No late homework is accepted. No credit is given for late assignments. The two lowest homework grades will be dropped.

- There will be additional assigned problems that you will need to solve on paper to show your work.

Recitation (10% of course grade) – weekly sessions lead by section TAs. Each student is assigned a section and block for recitation.

In-class Quizzes (15% of course grade) – Starting in week 2, quizzes will be given in each class. These questions will *sometimes* cover material in the textbook, set as part of the reading from previous classes, but may cover any topic, including general knowledge of physics, physical reasoning, and “interesting problems.”

- The “in-class” questions will be through digital sources, and sometimes a hard-copy format.
- Some of these may be available even if you do not come to class. However, there is a large strategic advantage in coming to class, as we will discuss some questions. Moreover, in some cases the questions will be a little challenging, such that the in-class discussions are very valuable. **The reasoning behind the correct answer is much more important than getting the answer correct.**
- **Communicating the answers to someone outside class, while in-class, is considered cheating. Communicating the answers to anyone who did not attend the relevant class is considered cheating.**

Midterms (25% of grade) –There will be four midterms scheduled, covering 3-4 chapters of material. These will be comprehensive and you should plan on using the entire 50 minutes of class time. The lowest midterm will be dropped from your final grade.

Final Exam (40% of grade) –The final exam will cover all topics and materials given through this course.

CLASS POLICIES

Students and faculty each are responsible for maintaining an appropriate learning environment. Students who fail to adhere to such behavioral standards may be subject to discipline. Faculty have the professional responsibility to treat all students with understanding, dignity and respect, to guide classroom discussion and to define a reasonable space within which they, and the students express opinions. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender identity, and nationality.

For the benefit of your fellow students and your instructor, you are expected to practice common courtesy with regard to all course interactions. For example:

- Act as mature and responsible adults at all times.
- The use of cell phones is not allowed during class. Ringer volume must be set to silent before class starts.
- In this large class, talking to your neighbor, even very quietly and briefly, is very disruptive. Offenders will be asked to leave class. Students are actively encouraged to ask talkative neighbors to be quiet.
- Laptops can only be used for class related issues (no Facebook, web-surfing, Netflix, etc.) and must have their volume set to completely silent. Students should be aware that their laptop screens are clearly visible to those sitting behind them, so they should refrain from displaying personal, distracting or otherwise embarrassing material.
- Show up to class on time, and be prepared to learn when class starts.

The University does not have a mandatory attendance policy nor is roll taken each class period. There will be quizzes and in-class assignments that will serve as proof of attendance. Each student is responsible for all materials presented, including lecture notes and in-class demonstrations. If a class is missed for a valid reason (family emergency, medical, university-related travel), it is the student's responsibility to contact the instructor to obtain any assignments or additional information.