SYLLABUS

Spring 2020

Physics 170 – General Physics I

COURSE TIME: MWF 11:30 –12:20 **INSTRUCTOR:** Dr. Sara Petty

CREDIT: 4 semester hours OFFICE: Watanabe 410

LOCATION: PSB 217 EMAIL: pettys@hawaii.edu

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

Email: When you email me, put your course "PHYS170" in the subject line. This helps me efficiently help you.

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 <u>University Physics with Modern Physics 15th</u> <u>edition</u>. 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.

LAB: If you also need to take PHYS 170L lab, it is strongly recommended that you do so concurrently with the lecture; the lab provides a hands-on way of reinforcing and complementing many of the topics presented in lecture.

Please contact the lab TAs for any questions regarding lab courses. https://www.phys.hawaii.edu/~philipvd/20_spring_intro_labs_uhm.html

CLASS-ID: Include your 8-digit Student ID on all exams. You will also be asked to enter your ID for the Mastering Physics system. **It is very important that you do this to receive credit for your work.**

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. Check regularly for updated materials.

All homework will be online through Mastering Physics. If you do not sign up for Mastering Physics, you will get a "0" for your Homework category grade (30% of grade).

MASTERING PHYSICS:

We will be using Pearson's **Mastering Physics** for the 15th edition of Young & Freedman's <u>University</u> <u>Physics with Modern Physics</u>.

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 https://www.pearsonmylabandmastering.com/northamerica/
- 2. Register with our specific course ID: **petty57273**
- 3. Use our course specific access code: DSCKUN-CHURR-RISEN-SWEET-ORACY-RISES
- 4. **Use your 8-digit UH student ID number, and your UH email for your account**. If you do not, I cannot match your work to give you credit.
- 5. Do not create multiple accounts. I will pick the lowest score between them if you do.

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. Since all homework is online for this course, I do not recommend opting out.

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. Do not email me asking what you missed.

GRADING

Homework 30%
Recitation 10%

Midterms 30%
Final Exam 30%

Homework (30% 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.
- See the Homework Guidelines and Resources handout under Resources in Laulima.

Recitation (10% of course grade) – weekly sessions lead by section TAs. Each student is assigned a section and block for recitation. I will assign weekly prep questions through Laulima. You are expected to do these <u>before</u> going to Recitation.

Midterms (30% 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.

• Because the lowest midterm is dropped, there are no make-up exams.

Final Exam (30% of grade) –The final exam will cover all topics and materials given through this course.

How to succeed in this course

Students who previously received a B or better in this course did the following:

- 1. Came to class, and participated during class. Read the content before coming to class.
- 2. Attempted and completed all assignments.
- 3. Showed their work, and took careful notes.
- 4. Used the campus-wide resources for homework help.
- 5. Came to office hours.

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, and other devices can only be used for class related issues 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.
- If cheating is suspected during an exam, the instructor has the right to ask you to leave. You will be referred to the Office of Judicial Affairs.
- It is not acceptable to sell, circulate, or distribute the materials from this course. This includes "Chegg" or other online platforms. You will be referred to the Office of Judicial Affairs.

The University does not have a mandatory attendance policy nor is roll taken each class period. There will be ungraded in-class problems that will help students prepare for exams and complete their homework. Each student is responsible for all materials presented, including lecture notes and in-class problems. 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.