

COLLEGE PHYSICS II

PHYS 152

2025 Spring

Instructor:	Alex Dvornikov	Time (Sec 1):	MWF 11:30 – 12:20 pm
Email:	olexiy@hawaii.edu	Time (Sec 2):	MWF 12:30 – 1:20 pm
Office:	WAT 433	Place:	PSB 217

Welcome! We will explore electricity & magnetism, circuits, light, and a bit of modern physics. I hope that you will see the profound importance and ubiquity of physics and have fun.

Schedule: The tentative schedule is on the next page.

Labs: Labs are independent of the lectures and start the second week of the semester. [Here](#) is a link with the details, FAQs, and the lab TA office hours.

Help Hours (Instructor): W 3 - 4:30 pm at MSB 303, R 1:30 - 3 pm at KELL 414.

Help Hours (Learning Assistants): Watanabe Hall Room 421

M 1:30 – 2:30 pm

T 11:45 am – 2:15 pm

W 12:30 - 2:30 pm

R 12 – 1:30 pm, 3 - 4 pm

F 12:30 - 2:30 pm

Textbook: Young & Adams, *College Physics 11th Ed.* Ch. 17 – 28

You already have digital access by registering for this course. Do **not** pay again.

For access instructions, please, see the *Pearson* document in the Resources folder on Laulima.

Grading: Homework (30%), Quizzes (10%), Test 1 (20%), Test 2 (20%), Final (20%).

Your overall grade will be curved. The final exam may also be chosen to constitute the entire grade.

Homework: Online problems.

The deadlines are posted on Pearson in **Eastern Time**; please, do not mix up the time zones!

Quizzes: Pop quizzes during class. Lowest score dropped.

Exams: There will be 2 tests (**Feb. 14, Mar. 28**) and a final.

Final (Sec 1): May 16, Friday, 12 - 2 pm.

Final (Sec 2): May 12, Monday, 12 - 2 pm.

Extra Credit: Up to 5%.

Option 1: [Penny battery](#) or [Homopolar motor](#) - 2.5%.

Build and submit photos (or video links) in the Assignments folder on Laulima by **Mar. 23**.

Option 2: [Blue Sky](#) or [Critical Angle](#) - 2.5%.

Build and submit photos (or video links) in the Assignments folder on Laulima by **May 4**.

Academic Honesty: All incidents will be reported to the department chair and dean. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation.

Tentative Schedule

Week 1 (Jan. 13, 15, 17): Ch. 17 – Electric Charge & Electric Fields

Week 2 (Jan. **20 - MLK Day**, 22, 24): Ch. 17 – Electric Charge & Electric Fields

Week 3 (Jan. 27, 29, 31): Ch. 18 – Electric Potential & Capacitance

Week 4 (Feb. 3, 5, 7): Ch. 18 – Electric Potential & Capacitance

Week 5 (Feb. 10, 12, **14 - Test 1**): Ch. 19 – Current, Resistance, and DC Circuits

Week 6 (Feb. **17 - President's Day**, 19, 21): Ch. 20 – Magnetic Field & Magnetic Forces

Week 7 (Feb. 24, 26, 28): Ch. 21 – Electromagnetic Induction

Week 8 (Mar. 3, 5, 7): Ch. 22 – AC Circuits

Week 9 (Mar. 10, 12, 14): Ch. 23 – Electromagnetic Waves

Spring Recess (Mar. 17 - 21)

Week 10 (Mar. 24, **26 - Kuhio Day**, **28 - Test 2**): Ch. 23 – EM Waves

Week 11 (Mar. 31, Apr. 2, 4): Ch. 24 – Geometric Optics

Week 12 (Apr. 7, 9, 11): Ch. 25 – Optical Instruments

Week 13 (Apr. 14, 16, 18): Ch. 26 – Interference & Diffraction

Week 14 (Apr. 21, 23, 25): Ch. 27 – Relativity

Week 15 (Apr. 28, 30, May 2): Ch. 28 – Photons, Electrons, Atoms

Week 16 (May 5, 7, **9 - No Class**): Final Review

Finals Week

Final (Sec 1): May 16, Friday, 12 - 2 pm.

Final (Sec 2): May 12, Monday, 12 - 2 pm.