PHYS1512 - College Physics II LR1 VAN - MWF 8:30-9:20

Instructor:Craig KletzingOffice:502 VANPhone:335-1904

Office Hours: Drop in: MW 2:00-3:00 PM, Th 11:00 AM-12:00 PM, or by appointment

Department: Physics & Astronomy, 203 Van Allen Hall, Prof. Fred Skiff, Chair

Required Texts: Cutnell & Johnson Physics, Young & Stadler, vol. 2, 11th ed.,

with WileyPLUS, John Wiley & Sons, 2018.

Experiments in Electricity, Magnetism, & Light + Quantum Physics

by Faculty & Staff, UI, Department of Physics & Astronomy, 2019-2020 edition

Textbook & WileyLUS:

Students who took PHYS 1511 in Fall 2018 do not need to purchase a new Wiley-PLUS code because the code from the first semester is good for the second semester. A paper copy of the textbook can usually be found online for less than \$20. Prior editions (8e, 9e, or 10e) cover the same material.

Students who did not take PHYS 1511 in Fall 2018: you will need to purchase a WileyPLUS code. We have arranged with Wiley to offer a one-semester registration code at reduced price. This will be made available via the course ICON webpage. This provides web access to the online textbook and the other WileyPLUS features including the online homework system that we will use. For a paper copy of the textbook, this can usually be found online for less than \$20. Prior editions

(8e, 9e, or 10e) also cover the same material.

Course Description: An introduction to the physics of electricity and magnetism including electromag-

netic waves, light, optics, and modern physics. The course is intended for prehealth majors and other students with need for an algebra-based introductory physics course. We will cover Ch. 18-32 in the text at a pace of roughly one chapter per week. Specific reading assignments will be given in class and on

ICON. This course requires the use of algebra and trigonometry.

Course Preparation: This is a 4 s.h. course. CLAS guidelines are that students should expect to spend

a minimum of two hours per semester hour per week on study outside of class.

This means 6-8 hours per week on homework, reading, and other study.

Student Response

System:

For in-class and discussion section interactive questions, we will use the Top-Hat student response system, commonly known as 'clickers'. You will need a WiFiconnected device - mobile phone, tablet, or computer - and will need a license. Students can purchase licenses (semester, annual or lifetime) through credit cards (online or IMU Bookstore) or financial aid (IMU Bookstore only). Information on purchasing a license directly from Top-Hat can be found at this website:

https://success.tophat.com/s/article/University-of-lowa-Single-Sign-On-

Account-Setup#new-student

Homework: Assigned every Friday, due the following Friday. Homework uses the web-based WileyPLUS system. Students are encouraged to discuss problems together, but must do their own work on their individual solutions. Students may work on homework assignments as much as desired before the due date and problems may be repeated for full credit. Use of online solution websites is strongly discouraged because physics is learned by doing problems, not by using someone else's solution. No credit is awarded for late homework. Homework can be accessed from ICON

Exams: Three one hour evening midterm exams.

One two-hour final exam.

Grading:

Lab - 15% Homework - 15% Mid-term exams - 15% each Final exam - 25%

Final course grades will be based on the total score using the above percentages and will be given using plus/minus grading. There will be no make-ups for the one-hour exams except in truly extraordinary circumstances for which the student comes to the instructor before the exam to plan a make-up. Only 9 of the 10 labs will be counted toward grading, however, there will be no make-up labs.

Discussion Section:

These will be interactive sections that will focus on solving example problems to help students understand how to apply the concepts discussed in lecture and will help in solving homework problems.

Supplemental Instruction:

Supplemental Instruction (SI) is designed to organize and improve the ways in which students prepare and study content for class, outside of class. SI helps students gain a greater understanding of course material and learn new ways to study. SI is free, open to all students enrolled in this course, and voluntary for students to attend. Students can attend any session throughout the semester, attendance is on a drop-in basis. There will be three sessions per week at 3:00 PM on Sundays, 1:30 PM on Mondays, and 5:00 PM on Thursdays. Sessions will start the second week of classes on Sunday, January 26. All sessions will be in the ARC (Academic Resource Center) located in the Ground Floor, IMU. It is to the right of Hills Bank, across from Java House.

Laboratory:

Laboratory is a key part of the course. Lab does not meet during the first two weeks of class or during exam weeks (except for the first exam). Eating and drinking in laboratory is not allowed. Conflicts between laboratory meeting times and night exams offered in other classes are to be resolved by the student asking for a make-up exam for the conflicting night exam. University policy is that instructors must offer such a make-up exam and that regularly scheduled class time including laboratory takes precedence over night exams.

Schedule of Exams

Hour Exam 1: WWednesday, February 19, 2020, 6:30 PM in LMacbride Hall Auditorium Hour Exam 2: Wednesday, March 25, 2020, 6:30 PM in Macbride Hall Auditorium Hour Exam 3: Wednesday, April 22, 2020, 6:30 PM in Macbride Hall Auditorium

Absences and Attendance

Students are responsible for attending class and for contributing to the learning environment of a course. Students are also responsible for knowing their course absence policies, which will vary by instructor. All absence policies, however, must uphold the UI policy related to student illness, mandatory religious obligations, including Holy Day obligations, unavoidable circumstances, or University authorized activities (https://clas.uiowa.edu/students/handbook/attendance-absences). Students may use this absence form to aid communication; the instructor will decide if the absence is excused or unexcused (https://clas.uiowa.edu/sites/default/files/ABSENCE%20EXPLANATION%20FORM.pdf)

Academic Integrity

All undergraduates enrolled in courses offered by CLAS have, in essence, agreed to the College's Code of Academic Honesty. Misconduct is reported to the College, resulting in suspension or other sanctions, with sanctions communicated with the student through the UI email address. (https://clas.uiowa.edu/students/handbook/academic-fraud-honor-code).

Accommodations for Disabilities

UI is committed to an educational experience that is accessible to all students. A student may request academic accommodations for a disability (such as mental health, attention, learning, vision, and physical or health-related condition) by registering with Student Disability Services (SDS). The student is then responsible for discussing specific accommodations with the instructor. More information is at http://sds.studentlife.uiowa.edu

Administrative Home

The College of Liberal Arts and Sciences (CLAS) is the administrative home of this course and governs its add/drop deadlines, the second-grade-only option, and related policies. Other colleges may have different policies. CLAS policies may be found here: http://www.clas.uiowa.edu/students/handbook

Communication and the Required Use of UI Email

Students are responsible for official correspondences sent to the UI email address (uiowa.edu) and must use this address for all communication within UI (Operations Manual, III.15.2).

Complaints

Students with a complaint should first visit with the instructor or course supervisor, and then with the Chair of the department, , Prof. Fred Skiff, through the Department of Physics & Astronomy Main Office in 203 VAN. Students may next bring the issue to the College of Liberal Arts and Sciences. For more information, see https://clas.uiowa.edu/students/handbook/student-rights-responsibilities.

Final Examination Policies

The date and time of every final examination is announced by the Registrar generally by the fifth week of classes. **No exams of any kind are allowed during the last week of classes.** All students should plan on being at the UI through the final examination period. It is the student's responsibility to know the date, time, and place of the final exam. For more information, visit: https://registrar.uiowa.edu/final-examination-scheduling-policies).

Do not plan your end of the semester travel until the final exam schedule is announced.

Nondiscrimination in the Classroom

UI is committed to making the classroom a respectful and inclusive space for all people irrespective of their gender, sexual, racial, religious or other identities. Toward this goal, students are invited to optionally share their preferred names and pronouns with their instructors and classmates. The University of lowa prohibits discrimination and harassment against individuals on the basis of race, class, gender, sexual orientation, national origin, and other identity categories set forth in the University's Human Rights policy. For more information, contact the Office of Equal Opportunity and Diversity (diversity.uiowa.edu).

Sexual Harassment

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community must uphold the UI mission and contribute to a safe environment that enhances learning. Incidents of sexual harassment must be reported immediately. For assistance, please see https://osmrc.uiowa.edu/.