

PHYS 1511

College Physics I

2016 Syllabus

Instructor: Jasper S Halekas
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Office Hours: Tuesday 2:00-3:00pm,
Wednesday 9:30-10:30 am,
Thursday 4:00-5:00pm,
Or by Appointment

Department: Physics and Astronomy, 203 Van Allen Hall, DEO Fred Skiff

Description: This course is intended for pre-medical, pre-dental, and other students who desire a physics course without calculus. Mechanics, motion, sound, heat, and thermodynamics will be covered. The course does not require calculus, but will utilize algebra, geometry, and trigonometry. Numerical examples and lab experiments will be chosen to illustrate basic principles. Course grades will be based on homework, two in-class midterms, a final exam, and lab performance. The three weekly lectures are given by Prof. Halekas, and the lab and discussion sections are each conducted by a TA. We will cover Ch. 1-16 in the text. Specific reading and homework assignments will be listed on the course web page.

Lectures: MWF 8:30-9:20, Lecture Room 1 Van Allen Hall

Discussions/Labs: Individual by section

Required Text: *Cutnell & Johnson Physics 10e (with Wiley Plus)*,
David Young and Shane Stadler.

Required Lab Text: *Experiments in Mechanics, Wave Motion, and Heat*, Fall 2016
Ed. Chuck Williamson and Anthony Moeller.

Course Web Pages: http://www.physics.uiowa.edu/~jhalekas/teaching/cphysI_2016/index.html
ICON: <https://uiowa.instructure.com/courses/8615>
WileyPLUS: <http://www.wileyplus.com/class/528183>

“Clickers”: The course will make extensive use of Student Response Systems. Student response systems are required for every class lecture after the first week. This semester, the University of Iowa is transitioning from physical

Homework: Weekly homework assignments, which will include both conceptual and mathematical portions (assigned separately, since you get one try for conceptual problems, but three tries for mathematical problems), are to be completed online using WileyPLUS. All assignments must be completed online by 11:00pm on Thursdays. Late homework will not be accepted. You are allowed to work with other students on the homework, but each student must calculate the solutions to his/her own questions (which will have different numerical answers) and submit the answers on WileyPLUS. WileyPLUS homework is electronically graded.

There will be 12 math and 12 conceptual homework assignments, but the lowest of each will be dropped, and only the top 11 scores for each type will be counted toward the final grade.

Reading: Reading assignments should be completed before lecture. Completion of the reading is essential for class discussion to be productive, and tests may include material not explicitly covered in class.

Labs: The laboratory assignments are a key part of the course, to be held under the supervision of your teaching assistant, who will also grade the laboratory reports. Questions about laboratory grading should be directed to your TA. Eating and drinking in the 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. Only 9 of 10 labs will be counted toward the final grade, however, there will be *no* make-up labs.

Exams: Midterm exams will be held during regular class hours on the dates specified above. The final exam will be two hours, scheduled during finals week at a time to be announced. Midterm exams will cover the material specified above, and the final exam will be comprehensive. Exams may cover material not explicitly discussed in class – reading is important! Any material in the textbook or lectures that you are not responsible for on exams will be explicitly noted. There will be no make-ups for the one-hour exams except in extraordinary circumstances, and **only** if the student comes to the instructor **before** the exam to plan a make-up.

Exams will be closed book (an equation sheet will be provided), will be multiple choice, and will include both conceptual questions and questions

requiring mathematical calculations.

Absolutely no cheating will be tolerated. Anyone caught copying or allowing someone else to copy from his or her exam will receive a zero for the exam, and may face disciplinary action.

Participation: Participation will be tracked by student response during lectures. Questions are un-graded, so any response, correct or incorrect, counts as participation. Extra credit will be assigned based on participation on a lecture-by-lecture basis (answering a question during a lecture counts as participation for that lecture), up to a maximum of 2% of the overall course points. In other words, the extra credit will be worth up to 10% the value of the homework and labs, and up to 13.33% the value of each of the midterms. Extra credit will be awarded based on the following scale:

>60% participation	0.5% of overall points
>80% participation	1.0% of overall points
>90% participation	2.0% of overall points

Note that for the purposes of this credit, 90% participation earns you the maximum points. This is to allow for a few unavoidable absences, dead batteries, technological issues, etc.

Absence Policy: Attendance is encouraged but not required for all regular class meetings, but any opportunities for extra credit through participation will not be made up for any reason in the event of absence (note that 90% = 100% for the purposes of the participation credit, so a few unavoidable absences will not eliminate the student's opportunity for bonus credit).

Attendance during scheduled exams is required and make-up exams will only be given if the student comes to the instructor with appropriate justification *before* the exam to plan a make-up. Justification required is either a completed UI Student Absence form, or other statement regarding authorized activities signed by a responsible official.

Communication: Students may communicate with the professor by phone, e-mail, or in person. E-mail messages and phone calls may not always be answered immediately (other than in emergencies). Students with issues or questions should if possible raise them in person, in discussion, by attending office hours, or by scheduling an appointment with the professor.

Physics Tutorials: Teaching assistants are available for free tutoring in the TILE Commons Room, 310 Van Allen Hall, during posted hours.

College of Liberal Arts and Science Policies & Resources

Administrative Home

The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Different colleges may have different policies. Questions may be addressed to 120 Schaeffer Hall, or see the CLAS Academic Policies Handbook at <http://clas.uiowa.edu/students/handbook>.

Electronic Communication

University policy specifies that students are responsible for all official correspondences sent to their University of Iowa e-mail address (@uiowa.edu). Faculty and students should use this account for correspondences ([Operations Manual, III.15.2](#), k.11).

Accommodations for Disabilities

The University of Iowa is committed to providing an educational experience that is accessible to all students. A student may request academic accommodations for a disability (which includes but is not limited to mental health, attention, learning, vision, and physical or health-related conditions). A student seeking academic accommodations should first register with Student Disability Services and then meet with the course instructor privately in the instructor's office to make particular arrangements. Reasonable accommodations are established through an interactive process between the student, instructor, and SDS. See <http://sds.studentlife.uiowa.edu/> for information.

Academic Honesty

All CLAS students or students taking classes offered by CLAS have, in essence, agreed to the College's [Code of Academic Honesty](#): "I pledge to do my own academic work and to excel to the best of my abilities, upholding the [IOWA Challenge](#). I promise not to lie about my academic work, to cheat, or to steal the words or ideas of others; nor will I help fellow students to violate the Code of Academic Honesty." Any student committing academic misconduct is reported to the College and placed on disciplinary probation or may be suspended or expelled ([CLAS Academic Policies Handbook](#)).

CLAS Final Examination Policies

The final examination schedule for each class is announced by the Registrar, generally by the fifth week of classes. Final exams are offered only during the official final examination period. **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. Once the Registrar has announced the date, time, and location of each final exam, the complete schedule will be published on the Registrar's web site and will be shared with instructors and students. It is the student's responsibility to know the date, time, and place of a final exam.

Making a Suggestion or a Complaint

Students with a suggestion or complaint should first visit with the instructor (and the course supervisor), and then with the departmental DEO. Complaints must be made within six months of the incident (CLAS [Academic Policies Handbook](#)).

Understanding 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 have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI [Comprehensive Guide on Sexual Harassment](#) for assistance, definitions, and the full University policy.

Reacting Safely to Severe Weather

In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit the [Department of Public Safety website](#).