PHYS:1511: College Physics 1, Spring 2016
Department of Physics and Astronomy
University of Iowa

Instructor: Prof. Scott D. Baalrud
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Office Hours: Mondays 10:30 am – 12 noon
Wednesdays 10:30 am – 12 noon
or by appointment

Department DEO: Prof. Fred Skiff, 203 Van Allen Hall

Lecture: MWF 9:30am - 10:20am in LR2 VAN
Labs and Discussion: Several sections - check ISIS for times

Course Website: www.physics.uiowa.edu/~sbaalrud/1511s16.html
ICON page: http://icon.uiowa.edu
WileyPLUS: www.wileyplus.com/class/499030


Description: This course is intended for pre-medical, pre-dental, and other students who desire a physics course without calculus. Mechanics, motion, fluids, sound, heat, and thermodynamics are covered. Numerical examples and lab experiments are chosen to illustrate basic physical principles. Problem solving will utilize methods from algebra, trigonometry and geometry. Course grades are based on two in-class midterm exams, a final exam, lab performance, and homework. Each week three lectures are given by Prof. Baalrud and one three-hour lab is conducted by a TA. The Discussion Section is a problem-solving session conducted by the TA.

Grading:
Homework: 20%
Labs: 20%
Midterm 1: 15%
Midterm 2: 15%
Final Exam: 30%

Grading will follow CLAS guidelines, as described here:
http://clas.uiowa.edu/faculty/
teaching-policies-resources-grading-system-and-distribution

Plus (+) and minus (-) scores will be used, but the score A+ will only be awarded in cases of extraordinary performance.

Exam Schedule:
Midterm 1: February 26, covers chapters 1–5.2
Midterm 2: April 8, covers chapters 5.3–10
Final Exam: Finals week (time TBD), covers chapters 1–16
Reading: Reading assignments for each lecture can be found on the course webpage. Students are strongly advised to read the assigned sections before lecture. This will make for a more efficient use of lecture time, and will facilitate class discussion. The reading assignments represent the most comprehensive presentation of the course material.

Attendance: Attending lectures and discussions is highly recommended, but not required. Each represents an essential aspect of the course, where concepts are presented and problem solving techniques are explained. These should not be missed. Attendance at exams is required. Attendance at lab is required (10 out of 11 lab scores will count toward that portion of the grade).

Clickers: The Student Response System by Turning Technologies, commonly known as clickers, will be used to solicit student responses to in-class questions during lecture and discussion. This will provide a measure of feedback that the instructor will use to adjust lectures. These may be purchased along with the textbook at the bookstore. If you would like help with your clicker, contact the ITS Help Desk located on the 2nd floor of the Old Capitol Mall or email at helpdesk@uiowa.edu. The clicker channel is 46 for LR2.

Labs: Lab sections are run by teaching assistants, who also grade lab reports. Each lab has a section of introductory material and pre-laboratory questions written into the lab manual. Students should read the introductory material, the experimental procedure and answer the pre-laboratory questions before coming to lab. The lab schedule is posted on the course website. The grade for the laboratory component of the course will be based on participation and lab reports submitted to the teaching assistants at the end of each lab. Any questions regarding the labs or grading of lab reports should be directed to the appropriate teaching assistant. The final score will be based only on the top 10 out of 11 lab report scores. That means students can miss 1 lab without penalty. There will be no make-up labs. If students have conflicts between lab meetings and night exams in other courses, these should be resolved by the student asking for a make-up exam for the conflicting night exam. According to University policy, regularly scheduled class time takes precedence over night exams.

Discussion: Discussions are run by teaching assistants. Attendance at discussion sections is highly recommended. Lectures will focus on concepts, whereas discussions will focus on problem solving techniques. Mastering these techniques will be essential for success in completing homework assignments and on exams.

Homework: Weekly homework will be assigned using WileyPLUS, except on exam weeks. Assignments will generally be posted on Fridays and due the following Friday. The deadline on each assignment will be strictly enforced. No late homework will be accepted. Students may work together on homework, but each student must individually calculate his or her own solutions and submit the answers on WileyPLUS. Calculators may be used to complete homework assignments.
Exams: Midterm exams will be in class during the usual 50 minute lecture period. The final exam will be 2 hours, scheduled during finals week at a time to be determined. All exams will consist of several multiple choice questions. They will test both understanding of concepts and mastery of problem solving techniques. Exams will be closed-book and closed-notes. A formula sheet will be provided. **Students must bring their student ID to exams.** A basic calculator will be allowed. “Basic” will be defined by the SAT calculator policy, which can be viewed here [https://sat.collegeboard.org/register/calculator-policy](https://sat.collegeboard.org/register/calculator-policy)

Makeup exams will only be available in extraordinary circumstances for which there is an excused absence, and the student has obtained approval from the instructor well before the exam to plan the make-up. If you believe that you have a valid reason to reschedule an exam, please let Prof. Baalrud know as soon as possible to obtain approval for alternative arrangements.

Statement on cheating:

Cheating will not be tolerated. Any instance of cheating will be reported for disciplinary action. Cheating includes both copying other students work as well as allowing other students to copy your work. Collaboration is allowed on homework assignments, but each student must independently perform the calculations and record their own answers in the WileyPLUS system.

Work load:

CLAS guidelines state that students should expect to spend two hours working outside of class per semester-hour. Since this is a 4 semester-hour course, the expected workload is 8 hours per week outside of class (working on homework, reading, and other course preparation). This is in addition to lecture (3 hours), discussion (1 hour) and lab (3 hours). This suggests that students should plan to spend at least 15 hours per week on this course.

Resources:

**Free Help!:** The Department runs a tutorial room: 310 VAN. Schedule at: [www.physics.uiowa.edu/resources](http://www.physics.uiowa.edu/resources) This is a very valuable resource. Take advantage of it.

Advice:

1. Read the assigned book sections before lecture. This will enable more effective use of your time since lectures can then be used to fill in gaps in your initial understanding of the material.
2. Practice! Work example problems from the book and test your own understanding of the material.
3. Try not to fall behind. Later material will rely on a solid understanding of earlier material. For example, you will need a solid understanding of forces from the mechanics section to understand concepts such as pressure in the fluids section. This is only one example, there are many others.
4. Use the instructional resources that are available to you. Of course this includes lectures, discussions and labs. It also includes office hours, and the Physics Department tutorial room.
The College of Liberal Arts and Sciences Policies and Procedures

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
A student seeking academic accommodations should first register with Student Disability Services and then meet privately with the course instructor to make particular arrangements. See www.uiowa.edu/sds/ for more 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 tenth day 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.