

COURSE INFORMATION

29:006 Fall 2009 — The Physics of Everyday Experience: How Things Work

MWF 10:30 LR1 VAN

COURSE WEB PAGE: (not available on ICON)

<http://www.physics.uiowa.edu/~rmerlino/6Fall09/index.html>

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Office Hours Tuesday and Thursday 11 – 12:30 AM, or by appointment (email me)

Teaching Assistant TA contact information will be posted on the class web page under the Help Outside of Class Link

Required Textbook *How Things Work: The Physics of Everyday Life*, 4th Edition, by Louis A. Bloomfield, John Wiley Publisher (Some students have asked if the 3rd Edition of the textbook is still usable. Although there are only a few changes in the 4th Edition, the page numbers for the reading assignments and problem numbers may be different.)

Department of Physics and Astronomy

Main Office 203 Van Allen Hall

Phone 335-1686

DEO Professor Mary Hall Reno, 207 VAN, 335-1689, mary-hall-reno@uiowa.edu

Associate DEO Professor Paul Kleiber, 312 VAN, 335-1841, paul-kleiber@uiowa.edu

Course Registration Changes in course registration including adding and dropping will only be handled in the Physics Dept Office - Room 203 VAN between the hours of 8-12 and 1-5 Mon-Fri. **The instructor cannot sign drop/add forms**

Course Examinations There will be 2 (50 min) midterm exams given in class, and a final exam. **All exams are given in LR1**

Exam 1 Wednesday September 23

Exam 2 Wednesday October 28

Final Exam Thursday December 17, 7:30—9:30 AM in LR1 VAN

Exam Format All exams will be *multiple-choice*. All exams are closed book and no notes or other materials are permitted. A sheet of formulas and constants will be provided with each exam. **Calculators are NOT Permitted. Students will be required to show their university photo id or driver's license before or after exams.** *Make-up examinations will only be given in the event of verifiable medical excuses or for absence due to conflicting official university activities.* Students falling into one of these categories should inform me by email or phone as soon as possible.

Course Grading

- Your semester grade will be based strictly on the 2 midterm exams and the final exam; **there is no possibility of extra credit work**
- There is a maximum of 100 total points:
 - Midterm Exams 60 points (30 points each)
 - Final Examination 40 points
- The plus/minus system will be used in assigning course grades

Midterm Exam Scores and Semester Grades Exam scores will be posted on ICON at <http://icon.uiowa.edu/index.shtml>. Final grades are posted on Osiris.

Reading and Problem Assignments All reading and problem/conceptual question assignments will be posted on the class web page. **Students are strongly urged to work the problems although they will not be collected and graded, and will not directly count toward the semester grade.** Solutions to the assignments will be posted on the class web page.

Class Attendance Lecture demonstrations are an essential part of this course. Every attempt will be made to exhibit the everyday physics examples through the use of these demonstrations. There is really no substitute for being present when these demonstrations are performed.

Availability of Modifications Any student who has a disability, which may require some modification of seating, testing, or other class requirements, should contact me so that appropriate arrangements may be made. Students with disabilities should also contact the Office of Student Disabilities Services (335-1462)

Topics covered in this course

UNIT	TOPIC	LECTURES
1	The laws of motion	10
2	Physics of fluids	4
3	Heat and thermodynamics	5
4	Oscillations, waves and sound	4
5	Electricity and magnetism	7
6	Light and Optics	4
7	Modern physics	4

IMPORTANT DEADLINES

Last day to drop a course: November 2

Required Information Provided To Students

Procedures for Student Complaints: A student who has a complaint related to a Physics or Astronomy course should follow the procedures summarized below. The full policy on student complaints is on-line in the College's Student Academic Handbook <http://www.clas.uiowa.edu/faculty/handbook/5/f.shtml>. Ordinarily, the student should attempt to resolve the matter with the instructor first. If the complaint is not resolved to the student's satisfaction, the student should go to the course supervisor (if the instructor is a teaching assistant) or to Associate Chair, Professor Mary Hall Reno. If the matter remains unresolved, the student may submit a written complaint to the Associate Dean for Academic Programs, 120 Schaeffer Hall (335-2633). The associate dean will attempt to resolve the complaint and, if necessary, may convene a special committee to recommend appropriate action. In any event, the associate dean will respond to the student in writing regarding the disposition of the complaint. For any complaint that cannot be resolved through the mechanisms described above, please refer to the College's Student Academic Handbook for further information.

Plagiarism and cheating: A student suspected of plagiarism or cheating must inform the student in writing as soon as possible after the incident has been observed or discovered. Instructors who detect cheating or plagiarism may decide, in consultation with the departmental executive officer, to reduce the student's grade on the assignment or the course, even to assign an F. The instructor writes an account of the chronology of the plagiarism or cheating incident for the DEO (Associate Chair), who sends an endorsement of the written report of the case to the Associate Dean for Academic Programs, CLAS. A copy of the report will be sent to the student. A detailed policy is printed in the Schedule of Courses and the College's Student Academic Handbook.

Amount of Work Expected.—The College guideline is that one semester hour of credit is the equivalent of approximately three hours of work (class time + out-of-class preparation) each week over the course of a whole semester. In a typical lecture/discussion course, each hour of class normally entails at least two hours of outside preparation for the average student (e.g., in a three-credit-hour lecture course, standard out-of-class preparation is six hours per week). This standard is the basis on which the Registrar's Office assigns hours of University credit for courses.

Student Rights and Responsibilities: All students in the College have specific rights and responsibilities. You have the right to adjudication of any complaints you have about classroom activities or instructor actions. Information on these procedures is available in the Schedule of Courses and on-line in the College's Student Academic Handbook, available at

http://www.clas.uiowa.edu/students/academic_handbook/

You also have the right to expect a classroom environment that enables you to learn, including modifications if you have a disability. Your responsibilities to this class-and to your education as a whole-include attendance and participation. (Here an instructor could put specific information on his/her or the department's attendance policy.) You are also expected to be honest and honorable in your fulfillment of assignments and in test-taking situations (the College's policy on plagiarism and cheating is on-line in the College's Student Academic Handbook

http://www.clas.uiowa.edu/students/academic_handbook/). You have a responsibility to the rest of the class-and to the instructor-to help create a classroom environment where all may learn. At the most basic level, this means that you will respect the other members of the class and the instructor, and treat them with the courtesy you hope to receive in turn.

Information for students outside the College of Liberal Arts who are taking this course: This course is given by the College of Liberal Arts. This means that class policies on matters such as requirements, grading, and sanctions for academic dishonesty are governed by the College of Liberal Arts. Students wishing to add or drop this course after the official deadline must receive the approval of the Dean of the College of Liberal Arts. Details of the University policy of cross enrollments may be found at: <http://www.uiowa.edu/~provost/deos/crossenroll.doc>

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 Academic Handbook.

www.clas.uiowa.edu/students/academic_handbook/index.shtml

Academic Fraud

Plagiarism and any other activities when students present work that is not their own are academic fraud. Academic fraud is reported to the departmental DEO and to the Associate Dean for Academic Programs and Services who enforces the appropriate consequences.

www.clas.uiowa.edu/students/academic_handbook/ix.shtm

Making a Suggestion or a Complaint

Students with a suggestion or complaint should first visit the instructor, then the course supervisor and the departmental DEO. Complaints must be made within six months of the incident. www.clas.uiowa.edu/students/academic_handbook/ix.shtml#5

Accommodations for Disabilities

A student seeking academic accommodations should register with Student Disability Services and meet privately with the course instructor to make particular arrangements. For more information, visit this site:

www.uiowa.edu/~sds/

Understanding Sexual Harassment

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. Visit www.sexualharassment.uiowa.edu for definitions, assistance, and the full University policy.

Reacting Safely to Severe Weather

In severe weather, the class members should seek shelter in the innermost part of the building, if possible at the lowest level, staying clear of windows and free-standing expanses. The class will continue if possible when the event is over. (Operations Manual [16.14. i.](#))

Important University of Iowa Deadlines for Off-Cycle Courses

(Note: Use only for off-cycle courses. To find the deadlines for a particular course, visit this [Registrar](#) site and type in the course number and title:
www.registrar.uiowa.edu/more/coursedeadlines.aspx)