

PHYSICS 2325 Mechanics and Heat Spring 2005
updated 1/31/05

Lectures: Tuesday and Thursday, 11:00 - 12:15 FN 2.102

Prof. J. M. Izen Office: BE 3.312 (972) 883-2598 joe@utdallas.edu Mailbox: in FO 2.724
Office hours: Tu/Th after class. Please come up to the front of class and walk with me back to my office, or let me know that you will be along shortly.

Text: University Physics (11th ed.) Volume 1, Young and Freedman

Online HW: Mastering Physics for Young/Freedman, 11th ed., Course ID: PHYS2325IZEN
<http://www.masteringphysics.com/> support@masteringphysics.com

Online syllabus: <http://www.utdallas.edu/dept/physics/Courses/izen/phys2325.htm>

Yahoo!Group: <http://groups.yahoo.com/group/phys2325/>

unmoderated Yahoo!Group: http://groups.yahoo.com/group/phys2325_unmoderated/

Past evaluations (check online) [PHYS2325 Spring 2003-001](#) [PHYS2325 Spring 2003-002](#)

Teaching Assistant: J.P. Patel: jxp042000@utdallas.edu

Supplemental Instruction Leader: Vik Patel: vap013100@utdallas.edu

Official course announcements, schedule changes, and occasionally HW hints will be posted to the course Yahoo!Group. Prof. Izen and the course staff will occasionally post answers to questions received by email if they are of general interest. It is usually clear when a question is private in nature, but please indicate if wish your identity to be held confidential in a public answer. To subscribe, request a free Yahoo ID if you don't have one at <http://www.yahoo.com/>, then send an email to phys2325-subscribe@yahoogroups.com. You will need to subscribe, even if you choose to read postings with a web browser. To use the Yahoo WWW interface, you need to sign up for a free Yahoo ID. It is **your** responsibility to subscribe to the Yahoo!Group and read your email and/or check for postings via the web.

A separate, unmoderated Yahoo!Group is available for student use. This is a forum for students to get together to help each other with physics questions and arrange study sessions. I can not accept responsibility for the conduct of Yahoo!Group members. A few members of the Spring, 2000 class behaved very badly but there haven't been problems since then. I may shut the unmoderated group down if it ever gets badly out of hand. To subscribe to it, send an email to phys2325_unmoderated-subscribe@yahoogroups.com.

Online HW will typically be assigned Thursday evening and will typically be due by Wednesday midnight, or Sunday midnight when there is a test on Tuesday. Please check each assignment for its due date. Working problems is an essential part of the course. The Mastering Physics site provides solved sample problems and study aids in addition to HW assignments. Please read the section on Academic Dishonesty carefully regarding online HW.

All 3 Exams and the Final will all take place in the large Conference Center auditorium CN 1.112. My students during past semesters have appreciated the extra room. Students should bring their Comet Card to all exams. The Final will be similar in length to the first 3 tests and not comprehensive.

Letter grade cut-offs will be announced after each exam for your guidance, but it is your numerical score that is used for grading. Typically, an A will be an exam grade of > 75-80% and a B will be > 55-65%. Prof. Izen will take the announced cut-offs for each test into account when determining your course grade. Missed exams will be excused at Prof. Izen's discretion for very good medical reasons that you can document or extremely good personal reasons. If you plan to miss an exam, discuss it with Prof. Izen at the earliest possible date.

Grading: Online HW: 20%, Your best two tests: 25% each, Your worst two tests: 15% each. Class and discussion session participation will be a factor for borderline grading decisions.

Help: Here's the schedule for discussion/help sections and exam review, beginning the January 17:

Time	Location	TA
Every week		
M 3:00-4:30 PM	CB 1.106	J.P.
Tu 5:00-6:00 PM	CB 1.106	J.P.
W 3:00-4:30 PM	CB 1.110	J.P.

Time	Location	SI Leader
Every week		
M 5:30-6:30 PM	GR 2.508	Vik
Tu 3:00-4:00 PM	GR 2.508	Vik
W 5:30-6:30 PM	GR 2.318	Vik

Note: J.P. is conducting a poll on the Yahoo!Group to find a more convenient replacement for the MW time. Changes will be announced on the Yahoo!Group and in class.

TA/SI discussion times/locations were incomplete at Press Time. The discussion/help schedule will be posted on the [online syllabus](#) and an announcement will be sent to the [course Yahoo!Group](#) when it is available.

If you plan to arrive late, please email the TA/SI ahead of time. The TA's are instructed to take off for the rest of the hour if no one shows during the first 20 minutes of each hour, unless a student has emailed ahead that s/he will be late. We may juggle the schedule after the course has run a few weeks if some sessions are undersubscribed.

Academic Dishonesty

Plagiarizing the work of other students, providing information to other students during an exam, and bringing information into an exam in any way that is not explicitly approved by Prof. Izen is expressly forbidden. Should you inadvertently disclose information to another student or inadvertently become aware of information on another student's examination or, please bring it to the attention of Prof. Izen or the exam proctor immediately

You may choose whatever login name you wish for your online HW account, but you are to enter your UTD Net ID as your unique student identifier. If you don't know your Net ID, you may look it up at <http://netid.utdallas.edu/>. If you prefer, you may use your full Social Security number instead. The access privileges for an account registered for PHYS2325IZEN without a Net ID (or SSN) will be terminated, resulting in a zeroing of that student's HW grades.

Students may study and work not-for-credit Mastering Physics problems together, but students may not collaborate on the actual for-credit online homework assignments. Registering a second account for a preview of HW assignments is forbidden. Using the account of a student who plans to drop/withdraw or who has already dropped/withdrawn from the course is forbidden and will result in a disciplinary referral for both students. If a student not registered in our class helps a registered student for-credit problems, both students will be prosecuted. If an accomplice is not a student, many of the protections you enjoy as a student will not apply to him/her. For example, I may not reveal the name of a student I've prosecuted to your class, but I can and will talk to a non-student's current or future employer. Friends do not let friends take such a risk.

Confirmed honesty violations will certainly result in the creation of a disciplinary file with the University's judicial officer, plus other penalties as allowed under the University's disciplinary guidelines for intellectual honesty. I have prosecuted every student I have caught, and I have caught a discouragingly large number of students.

Tentative Course Schedule

<u>Class</u>	<u>Date</u>	<u>Chapter</u>	<u>Topics</u>
1	1/11	1	Introduction, Units, Vectors
2	1/13	2	Velocity, Acceleration, 1-D Motion
3	1/18	3	2-D and 3-D Motion, Constant Acceleration
4	1/20	4	Newton's Laws
5	1/25	4	Newton's Laws
6	1/27	5	Applications of Newton's Laws
7	2/1	5	Applications of Newton's Laws
8	2/3	6	Work
9	2/8	1 - 5	Exam I: CN1.112 (Up to Applications of Newton's Laws)
10	2/10	6,7	Work, Potential Energy
11	2/15	7	Return Exam I, Potential Energy
12	2/17	7	Potential Energy
13	2/22	12	Gravity
14	2/24	8	Momentum, Impulse, Collisions in 1-D
15	3/1	8	Collisions in 2-D
16	3/3	6 - 8, 12	Exam II: CN1.112 (Up to Collisions in 1D)
17	3/15	9	Return Exam II, Angular Motion
18	3/17	9	Moment of Inertia
19	3/22	10	Torque, Rolling,
20	3/24	10	Angular Momentum
21	3/29	11	Static Equilibrium
22	3/31	13	Simple Harmonic Motion
23	4/5		Exam III: (Up to Static Equilibrium)
24	4/7	15	Return Exam III, Waves
25	4/12	15, 14	Waves, Pressure
26	4/14	14, 18	Buoyancy, Ideal Gas
27	4/19	19	First Law of Thermodynamics, PV Diagrams
28	4/21	20	Second Law of Thermodynamics, Engines, Refrigerators
	4/24 11am		Exam IV/Final: (Harmonic Motion, Waves, Pressure, Thermodynamics)