PHYS1441-002: GENERAL COLLEGE PHYSICS I
Fall 2012

Instructor: Dr. Mingwu Jin
Office Number: Science Hall (SH) 132C
Email Address: mingwu@uta.edu
Office Hours: Monday and Wednesday 2:00-3:00PM
Section Information: PHYS1441-002

Time and Place of Class Meetings: SH103, Monday, Wednesday and Friday 1:00-1:50PM.

Description of Course Content: The first half of a one-year, non-calculus introductory physics course taken by pre-medical, pre-dental, biology and architectural majors and others. The study of mechanics, elasticity, fluids, heat and waves is supplemented by laboratory experiments. This course will cover the following topics:
Measurement and Estimating, Kinematics, Vectors, Newton's Laws – Chapters 1-4
Circular Motion, Gravitation, Work and Energy, Momentum, Rotation Motion – Chapters 5-8
Static Equilibrium, Fluids, Waves, Thermal Physics - Chapters 9-11, 13 or more if time allows

Student Learning Outcomes: Students grasp basic laws and principles of mechanics in order to fully understand phenomena in their fields that can be explained by fundamental mechanics and are able to apply these basic concepts and algebra/trigonometry for problem solving in order to analyze real problems in their field and to synthesize and evaluate solutions.

If you buy your textbook at the bookstore, make sure you get the version that comes with access to a course website at masteringphysics.com. Otherwise you can buy access at masteringphysics.com. You need to go there and register for class with course ID “JINPHYS1441F12”. Please make sure to use your student ID. All course related materials including homework assignments, tutorials, and lecture notes will be managed at the course website.

Descriptions of major assignments and examinations: 12 online homework assignments, 3 online tutorials, and 3 in-class exams (First two: tentatively Sep. 26 and Oct. 29. Final: Dec. 10). For the lab assignments and exams, please refer to your lab syllabus or contact Mr. Douglas Coyne at coyne@uta.edu.

Other Requirements: Familiarity with high school algebra and trigonometry is required. You must enroll in and pass a relevant lab section (contact the lab coordinator Mr. Douglas Coyne at coyne@uta.edu), unless exempt.

Attendance: Not required but please make your best effort to attend the lectures so that you can learn more efficiently and save time. Answers to conceptual questions will be provided in class only, but NOT in online lecture notes.

Grading: The grade will be divided into the following 4 parts as 100 regular points (a-c) plus 10 extra credit points (d):
(a) Homework - 25 points
(b) Exams (3) – 60 points: 2 exams with higher scores, 25 points each; 1 exam with the lowest score, 10 points.
(c) Lab – 15 points
(d) Extra credit (3 online tutorials) – 10 points as attending all exams is a prerequisite for extra credit.
All above points will be weighed by your performance in each category. For example, if you score 200 home work points out of total 250 points, your final homework points are $25 \times \frac{200}{250} = 20$.

Final grade: $A \geq 90$, $80 \leq B < 90$, $70 \leq C < 80$, $60 \leq D < 70$, and $F < 60$.
Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels.

Expectations for Out-of-Class Study: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 10 hours per week of their own time in course-related activities, including reading the textbook, understanding course lectures, completing assignments, and preparing for exams, etc.

Make-up Exams: No make-up exam allowed unless legitimate reasons are provided in advance.

Grade Grievances: Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current undergraduate catalog.

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student’s responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://www.uta.edu/ses/faq).

Americans with Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide “reasonable accommodations” to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Academic Integrity: All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

Instructors may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents’ Rule 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.
Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may contact the Maverick Resource Hotline by calling 817-272-6107, sending a message to resources@uta.edu, or visiting www.uta.edu/resources.

START STRONG Freshman Tutoring Program
University Tutorial and Supplemental Instruction (UTSI)/University College

All first time freshmen can receive six FREE hours of tutoring for this course and other selected subjects for this semester. Students must sign up and complete their first hour of tutoring by September 14th. To sign up, visit UTSI in 205 Ransom Hall/University College. Upon completion of your first tutoring appointment, you will receive five hours of additional free tutoring. Flexible tutoring hours are available from 7:00am – 9:00pm, seven days a week at secure locations on campus. All tutors receive extensive training. Find out more at www.uta.edu/Startstrong

Students in this class are encouraged to attend free  Supplemental Instruction (SI) sessions (regularly twice a week) and to ask help in Physics Clinic.

Lab Safety Training: Students registered for this course must complete all required lab safety training prior to entering the lab and undertaking any activities. Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., through the following August) and must be completed anew in subsequent years. There are no exceptions to this University policy. Failure to complete the required training will preclude participation in any lab activities, including those for which a grade is assigned.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations
constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**Course Schedule**

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<thead>
<tr>
<th>Aug 24-Sep 21</th>
<th>Chap 1 Introduction (2.5 lectures), Chap 2 1D kinematics (2.5 lectures), Chap 3 2D kinematics (3 lectures), and Chap 4 Newton’s laws (4 lectures)</th>
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<tbody>
<tr>
<td>Sep 24</td>
<td>Review #1</td>
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<tr>
<td>Sep 26</td>
<td>Exam #1</td>
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<tr>
<td>Sep 28-Oct 24</td>
<td>Chap 5 Circular motion (3 lectures), Chap 6 Work and energy (3 lectures), Chap 7 Linear momentum (3 lectures), and Chap 8 Rotational motion (3 lectures)</td>
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<td>Oct 26</td>
<td>Review #2</td>
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<tr>
<td>Oct 29</td>
<td>Exam #2</td>
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<tr>
<td>Oct 31-Nov 30</td>
<td>Chap 9 Static equilibrium (2.5 lectures), Chap 10 Fluid (3.5 lectures), Chap 11 Vibrations and waves (4 lectures), and Chap 13 Temperature and kinetic theory (3 lectures)</td>
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<tr>
<td>Dec 03</td>
<td>Review #3</td>
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<tr>
<td>Dec 10</td>
<td>Final Exam</td>
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As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. —Dr. Mingwu Jin

For the lab schedule, please refer to the lab syllabus or contact Mr. Douglas Coyne at coyne@uta.edu.