

PHYS161 - General Physics: Mechanics and Particle Dynamics

Fall Semester, 2015

Course description: General Physics: First semester of a three-semester calculus-based general physics course. Laws of motion, force, and energy; principles of mechanics, collisions, linear momentum, rotation, gravitation, simple harmonic motion, and fluids.

Pre-requisite: MATH 140

Co-requisite: MATH 141

Instructor: David C Buehrle
1330 Physics Building

x5-6045

dbuehrle@umd.edu

Office hours: Thursdays 9:00 - 11:00 AM

Lecture **SECTIONS 0101-0104: MWF 3:00 – 3:50PM, Toll Physics Building Room 1410 (Small Lecture Hall)**

SECTIONS 0301-0304: MWF 10:00 – 10:50AM, Toll Physics Building Room 1410 (Small Lecture Hall)

Discussion Sections Discussion sections will be conducted by the Teaching Assistant, and are a forum where students can ask questions about the course material, where you will take your quizzes, and where problems will be worked out with student participation.

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| Section | TA | Office | Day | Time | Room |
|---------|---|---------------------|-----|---------------------|----------|
| 0101 | Hao Wu, haowu@umd.edu | PSC 1264 x8 5058 | T | 3:00PM- 3:50PM | PHY 1402 |
| | Hao Wu, haowu@umd.edu | PSC 1264 x8 5058 | F | 10:00AM- 10:50AM | CHM 0128 |
| 0104 | Hao Wu, haowu@umd.edu | PSC 1264 x8 5058 | F | 11:00AM- 11:50AM | PHY 0405 |
| | Robert Buttles, rbuttles@terpmail.umd.edu | | R | 3:00PM- 3:50PM | PHY 1204 |
| 0302 | Theodore Mefford, temefford@gmail.com | PHY 3101 x5 6191 | T | 4:00PM- 4:50PM | PHY 1219 |
| | Theodore Mefford, temefford@gmail.com | PHY 3101 x5 6191 | W | 12:00PM- 12:50PM | PHY 0405 |

problem and then plug in the numbers at the end. This is especially true if the numbers are being randomized each time so everyone has different numbers.

Why You Need to do the Homework: One of the main ways you can understand Physics is by doing the homework. Do not wait until the night before it's due to start working on your homework. The homework can be expected to be difficult and it counts a lot towards your final grade in enabling you to succeed on your exams. A sure way to get an F in this course is to not do the homework or not give yourself enough time to work on it.

Getting started in electronic homework submission: To turn in your homework, you need to go to:

<http://www.masteringphysics.com/>

The site is best accessed with a current version of Windows Explorer or Firefox. If you run into problems, check the system requirements. In the past, there have been major trouble issues working Mastering in Physics through Google Chrome so don't try using Google Chrome.

Registering and Gaining Access to Mastering Physics: In order to turn in your homework, you will need to register at the Mastering Physics website <http://www.masteringphysics.com/>. To register, you need two things - an access number and the class ID. **When you buy (new or used copy of) your textbook you will need to purchase a Mastering Physics access key number. The easy way to do this is to simply buy it on line from the above MP website.**

Your class ID is: PHYS161BUEHRLEF2015

Exams

There will be two mid-term exams and a one 2 Hr. Final exam. You must take the Final exam in order to pass PHYS161.

All exams are closed book and closed note exams. For each exam, you may have one "cheat sheet" that contains physical constants and formulas. You may also have a calculator

Excuses

Missing an exam is not allowed without a valid documented excuse as defined by the University (medical problem, religious holiday, or serious family crisis). In all cases, a makeup exam must be completed in a reasonable amount of time or you will receive a score of zero for the exam. The makeup test or assignment, and the due date, must be arranged by consulting with Professor Buehrle as soon as possible after it becomes apparent that an exam date will be missed. Turning in late homework is not encouraged as it will result in a reduction of 10% of the points for every day late. If you are going to miss an assignment because of a religious holiday, it is your responsibility to inform the instructor in advance so that suitable arrangements can be made.

Final Grade

The final grade will be based on the components with the following weights:

Two mid-term exams: $2 \times 20\%$ = 40 %

Comprehensive Final Exam = 40 %

Homework, Participation, and Quizzes = 20 %

The final grade will be set at the end of the semester after all work is completed. In assigning the final grade, I will be guided by the University of Maryland grading policy, quoted below:

- A+, A, A- denotes excellent mastery of the subject and outstanding scholarship. (90-100)
- B+, B, B- denotes good mastery of the subject and good scholarship. (80-90)
- C+, C, C- denotes acceptable mastery of the subject and the usual achievement expected. (70-79)
- D+, D, D- denotes borderline understanding of the subject. It denotes marginal performance, and it does not represent satisfactory progress toward a degree. (60-70)
- F denotes failure to understand the subject and unsatisfactory performance. (< 60)

Students with disabilities

Students with disabilities should meet with the instructor at the beginning of the semester so that appropriate arrangements can be made to accommodate the student's needs.

University Closure

In the event of a University Closure the department will do its best to accommodate students by scheduling make-up sessions or revision of the lab schedule.

Academic Integrity

All students will be expected to comply with the University of Maryland's academic integrity policies, including the [code of academic integrity](#) and the [honor pledge](#). Failure to comply will result in a failing grade and will be reported to the Honor Council.