

COURSE INFORMATION SHEET PHYSICS 111- Mechanics FALL 2012

Lecture: Wednesdays and Fridays 2:30PM - 3:45 PM A2131 **Lab:** Monday 9:45AM - 11:00 PM A2141

Calendar Description: (3-3) A

This course teaches concepts in motion and kinematics, forces and acceleration, and energy, momentum, and torque. There is a lab component for this course.

Prerequisite: Math 30 **Instructor:** John Wiest

E-mail: jwiest@ambrose.edu

Office: L2050

Office Hours: Wed 12:00 PM-2:30 PM, or by appointment

Text: PHYSICS 9e

Cutnell & Johnson John Wiley & Sons, Inc.

Attendance:

Students are expected to attend all lectures and labss to ensure success on exams, and assignments. All assignments will be assigned and due during lab times. Students not attending lectures may find themselves missing information not covered in the textbook. Any student who is absent for an exam should speak to the professor and, where possible, provide a doctor's note.

Course Information:

The course consists of 2½ hours of lecture and 1¼ hour of lab/tutorial per week. The course will include 5 lab assignments and 3 Module Exams. The lab assignments will be given out during the labs and will be due the following lab. The Module Exams will be based on three large subsections: Kinematics, Force and Newton's Laws, Energy & Momentum. These are non-cumulative exams, the last of which will be written during our final exam time.

Learning Objectives:

By the end of the course, students should

- 1) Understand the basics of classical kinematics and be able to apply its equations in problem solving situations
- 2) Understand Newton's Three Laws of Motion and their uses in force problems

3) Understand Energy and Momentum and apply their concepts.

Information Covered in this course will be drawn from the following list of topics: Displacement, Speed and Velocity, Acceleration, Freely Falling Bodies, Vectors, 2D Kinematics, Projectile Motion, Relative Velocity, Uniform Circular Motion, Centripetal Acceleration, Rolling Motion, Force and Mass, Newton's Laws of Motion, Gravitational Force, Normal Force, Tension, Static and Kinetic Friction, Elastic Forces, Circular Morion, Newton's Law of Gravity Work, Work done by Gravity, Work done by a variable force, Power, Kinetic and Potential Energy, Conservation of Mechanical Energy, Collisions, Impulse, Torque

Important Dates

| Week of | Topic | | | |
|-----------------|--|--|--|--|
| Sept. 05 | First day of Classes | | | |
| Sept. 16 | Last day to enter course without permission or withdraw from | | | |
| | a course | | | |
| <i>Sept.</i> 24 | Assignment 1 due | | | |
| Sept. 17 | Spiritual Emphasis Day (No Classes) | | | |
| Oct. 1 | Assignment 2 due | | | |
| Oct. 8 | Thanksgiving (NO Classes) | | | |
| Oct. 15 | Assignment 3 due | | | |
| Oct. 17 | MODULE 1 EXAM Subject to change | | | |
| Oct. 29 | Last day to request revised time for a final examination | | | |
| Nov. 12 | Remembrance day (No classes) | | | |
| Nov. 12 | Last day to withdraw from courses without academic penalty | | | |
| <i>Nov. 14</i> | MODULE 2 EXAM Subject to change | | | |
| Nov. 5 | Assignment 4 due | | | |
| Nov. 19 | Assignment 5 due | | | |
| Dec. 3 | Last class | | | |

MONDAY DECEMBER 10 FINAL MODULE EXAM 9:00AM A2131

Marking: Assignments 25% MODULE EXAMS (Each worth the same) 75%

Grading Scheme

| A | 90-100% | C | 63-66% |
|---------------|---------|----|-----------|
| A- | 85-89% | C- | 60-62% |
| $\mathbf{B}+$ | 80-84% | D+ | 54-59% |
| В | 76-79% | D | 50-53% |
| B- | 70-75% | F | Below 50% |
| C+ | 67-69% | | |

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Student Handbook and Academic Calendar. Personal information, that is information about an individual that may be used to identify that individual, may be collected as a requirement as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy @ambrose.edu.

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a "Course Extension" from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the appropriate deadline (as listed in the Academic Calendar http://www.ambrose.edu/publications/academiccalendar). Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar and the Student Handbook that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean.

Students are advised to retain this syllabus for their records.

Course changes, including adding or dropping a course, may be made during the Registration Revision period, as outlined in the Calendar of Events. All course changes must be recorded on a Registration form, available from the Office of the Registrar. Due to circumstances such as class size, prerequisites or academic policy, the submission of a Registration form does not guarantee that a course will be added or removed from a student's registration. Students may change the designation of any class from credit to audit up to the date specified in the Calendar of Events, although students are not entitled to a tuition adjustment or refund after the Registration Revision period.

Withdrawal from courses after the Registration Revision period will not be eligible for tuition refund. Students intending to withdraw from some or all of their courses must submit a completed Registration form to the Registrar's office. The dates by which students may voluntarily withdraw from a course without penalty are listed in the Calendar of Events. A grade of 'W' will be recorded on the student's transcript for any withdrawals from courses made after the end of the Registration Revision period and before the Withdrawal Deadline (also listed in the Calendar of Events). 'W' grades are not included in grade point average calculations. A limit on the number of courses from which Academic a student is permitted to withdraw may be imposed. Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Office of the

Registrar in writing within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of \$50.00 must accompany the appeal to review final grades. If the appeal is sustained, the fee will be refunded.

Academic dishonesty is taken seriously at Ambrose University College as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to give credit to another person's ideas

or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from Ambrose. Students are expected to be familiar with the policy statements in the current academic calendar and the student handbook that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.