PHYSICS 6 – SYLLABUS – FALL 2012

<u>Ticket No. 3284: Prerequisite: Math 125 – Advisory: Math 240</u> <u>Class Meets: Monday-Wednesday, 6:50 p.m. – 10:00 p.m.</u>

INSTRUCTOR: Richard Rains

Office Phone (818) 364-7702 Email: <u>rainsre@lamission.edu</u>

Web Site: http://www.lamission.edu/~RAINSRE

REQUIRED TEXTS: "College Physics" by Serway/Vuille, 9th edition, Vol. 1

ISBN 0-8400-6848-4

Mission College Bookstore: New: \$170; Used; \$127 Textbooks. Com: New: \$130; Used: \$92, Rent: 58

Chegg.com: Rent: \$57 Price comparison web site:

http://www.CampusBooks4Less.com/prices/0470407352

"Physics 6 Lab Book": College Bookstore: \$4.50

OFFICE HOURS: Mon: 6:00 to 6:50 p.m.,

Tu-Th: 10:30 to 11:45 a.m. and 3:30 to 4:45 p.m.

Office number: CMS 241.

COURSE DESCRIPTION: a survey of basic physics using algebra and trigonometry,

with emphasis on mechanics, solids, heat, and waves.

STUDENT LEARNING OUTCOMES:

The Student will:

- 1. Identify the various forces acting on an object and analyze the resulting motion of the object using the laws of mechanics and gravity and appropriate mathematical techniques as demonstrated on quizzes, tests, and lab reports;
- 2. Solve problems dealing matter, motion, energy, heat, and waves, as demonstrated on quizzes, tests, and lab reports;
- 3. Acquire, analyze and graph scientific data collected with instruments during laboratory experiences, as demonstrated in lab reports;

<u>GRADING</u>: The final course grade will be determined by:

Monday chapter quizzes 20% of final grade

Wednesday mini-quizzes 10%

Midterm Exam: Mon. Oct 22

(Chapters 1-7) 20%

Final Exam: Mon Dec 10

(Chapters 8-14) 20%

Weekly Homework: 10%

Lab Reports: 10%

Lab Final Exam: Mon. Dec 3 10%

GRADE POSTING: Grades will be continually updated and posted on the Instructor's web page at: http://www.lamission.edu/~rainsre

Approximate grading scale for quizzes, mini-quizzes, tests and final course grade:

$$90\% - 100\% = A$$
, $75\% - 89\% = B$, $65\% - 74\% = C$, $40\% - 64\% = D$

MONDAY QUIZZES: At the beginning of the lab session, each Monday, there will be a one-hour, closed-book quiz. (A formula sheet will be provided.)

The Monday quiz will be given <u>only</u> during the first hour of class. If a quiz is missed, no make-up quiz will be given, and missed quizzes will be recorded as zero. However, to account for personal emergencies, the two lowest quiz grades will be dropped at the end of the semester.

Quizzes are closed book, closed notes. A sheet of useful formulas will be provided for use during the quizzes.

MINI-QUIZZES: A chapter is assigned to be read for each Wednesday, with a brief mini-quiz on that chapter at the beginning of that Wednesday's lecture period (see reading schedule below).

Only students who arrive during the first 15 minutes of class may take the mini-quiz. If a mini-quiz is missed, no make-up mini-quiz will be given, and missed mini-quizzes will be recorded as zero. However, the two lowest mini-quiz grades will be dropped at the end of the semester.

HOMEWORK: Homework is accepted only during the first 15 minutes of the class period on the day it is due. No late homework is accepted under any circumstances. However, the two lowest homework grades will be dropped at the end of the semester.

LAB: No make-up labs will be given, but the one lowest lab report grade will be dropped at the end of the semester.

Measurements made in the lab must be recorded in the pre-printed data sheets provided in the Lab Handout Booklet available in the Bookstore. Any student not using the pre-printed sheets by the third week of the semester will lose 10% on the lab report grade.

The lab final exam will be a practical exam.

MIDTERM AND FINAL EXAMS: Exams are closed book, closed notes. A sheet of useful formulas will be provided for use during the exams.

No early or late exams will be given under any circumstances. Please arrange your life accordingly.

PLAGIARISM: Lab reports must be written by the individual student. Any material which is word-for-word the same as another source must be placed in quotes with the source cited. Any word-for-word segments not in quotes will be considered as plagiarism. The grade for such a lab report will be zero.

CELL PHONE POLICY: No cell phone activity of any kind, including text messaging, is allowed in the classroom while the class is in session.

MEDIA PLAYER POLICY: Please remove all ear buds and headphones upon entering the classroom.

ETHICS POLICY: Any student found to be cheating on any quiz or test will receive an immediate zero on that activity. Cheating on the Final Exam will result in a grade of F for the class.

DATES listed on this syllabus may change. Each student is responsible for current class announcements, whether he/she is present in class or not.

Last Day to drop the class without a "W": Sept 7 (in person) Sept 9 (by Internet)
Last Day to drop the class with a "W": Nov 16 (in person) Nov 18 (by Internet)

<u>NOTE:</u> It is the student's responsibility to drop the class. After the final census date, the instructor is not responsible to exclude students who have become inactive.

Reading Assignments for mini-quizzes:

Sept 12: Chapter 3, Vectors and Two-Dimensional Motion

Sept 19: Chapter 4a, The Laws of Motion

Sept 26: Chapters 4b & 5a: Motion and Energy

Oct 3: Chapter 5b, Energy

Oct 10: Chapter 6, Momentum and Collisions

Oct 17: Chapter 7, Rotational Motion and the Law of Gravity

Oct 24: Chapter 8, Rotational Equilibrium and Dynamics

Oct. 31: Chapter 9, Solids and Fluids

Nov 7: Chapter 10 Thermal Physics

Nov 14: Chapter 11, Thermal Energy

Nov 21: Chapter 12, Thermodynamics

Nov 28: Chapter 13, Vibrations and Waves

Dec 5: Chapter 14, Sound



