COURSE SYLLABUS
PHY138, SECTION 02
SOUND, LIGHT, ELECTRICITY, AND MAGNETISM
3 CREDIT HOURS
Fall 2007

1. LOCATION OF CLASS MEETING

Room 101 of the Farrington Building

2. CLASS MEETING TIMES

Tuesday and Thursday between the hours of 11^{00} and 12^{30}.

3. INSTRUCTOR

The instructor for this class is Dr. Charles R. Meitzler

4. OFFICE LOCATION

313 Farrington Bldg.

5. INSTRUCTOR CONTACT INFORMATION

The instructor may be contacted in one of several ways:
1) Phone 936.294.1601
2) E-mail: crmeitzler@shsu.edu

6. OFFICE HOURS

Office hours for this course are at the following times:

Monday	$13^{00} – 16^{00}$
Tuesday	$13^{30} – 14^{00}$
Wednesday	$13^{00} – 16^{00}$
Thursday	14^{30} - 16^{00}
Friday	None

As per University policy, other times are available by appointment only. These office hours are subject to change and revision without prior notification during the semester for a variety of university-related functions or instructor illness.

7. COURSE DESCRIPTION

This course is described in the catalog as

> **PHY 138 General Physics — Mechanics and Heat.** [PHYS 1301] A modern treatment is made of the laws and principles of mechanics and heat. Derivations are carefully done using a non-calculus approach and considerable problem work is required. The laboratory work consists of quantitative experiments. Prerequisite: Credit or registration for MTH 163 or equivalent. Credit 3.

Student performance will be assessed via three exams and homework problems. Students are

encouraged to ask questions during class. Furthermore, you are encouraged to ask questions about any physical phenomena you observe in daily life or have read about in the newspaper.

8. COURSE OBJECTIVES

The objective of this course is to introduce the basic concepts of physics. To succeed at this course you will need to gain a basic knowledge of physics including kinematics, Newton's Laws, Conservation of Energy, Momentum and Angular Momentum. You will need to learn the basic concepts and then apply them to practical problems selected from the world that you see around you.

9. REQUIRED TEXTBOOKS

The textbook for this course is Enhanced College Physics 7th edition *by* Raymond A. Serway, Jerry S. Faughn, Charles A. Bennett, Chris Vuille (SBN-13: 9780495113690 , 2006)

10. REQUIRED SUPPLIES

The following supplies are required for this course:

1) Writing instrument
2) Scientific calculator with the following higher-order functions: sine, cosine, square root, exponentiation, scientific notation.
3) Notebook or ring binder with appropriate paper
4) Textbook

11. OPTIONAL TEXTS, REFERENCES, AND SUPPLIES

No optional texts, references or supplies are required for this course.

12. ATTENDANCE POLICY

As per University policy, attendance will be taken on a regular, periodic basis. Attendance is not used to calculate your final grade for the course. Attendance at scheduled exams is mandatory. Documentation from a licensed physician is required if you will miss an exam.

13. ASSIGNMENTS

Homework will be assigned on a regular basis and will consist of a set of questions and numerical problems. The purpose of the homework is to familiarize the student with the material being covered in the course. Homework will be assigned for each chapter as we progress through the semester. The problems are due one week after being assigned.

14. HOMEWORK GRADES

Homework grades will be provided on "Blackboard" as a courtesy only - the official grades are maintained off-line. Your final homework grade will be calculated off-line using the following formula:

$$HW = \frac{\text{Your total homework points}}{\text{Total available homework points}} \times 100$$

15. EXAMS

There will be three exams for this course: two exams during the semester and the final exam. The final exam will be held at the time scheduled by the University. All exams will consist of a mixture of conceptual questions and problems. Because of the nature of the subject, all exams are cumulative. The scheduled dates for the midterm exams is given in the following table

MT1	20 September 2007
MT2	1 November 2007
F	As scheduled by the university

The following additional rules and conditions apply:

1) **Attendance at exams is mandatory.** Failure to attend will result in the grade of zero.
2) Midterm grades will be provided on "Blackboard" as a courtesy only - the official grades are maintained off-line.
3) **Exam dates will not be changed due to conflicts with other courses.** Failure to attend will result in a grade of zero being given to the student.
4) **Make-up exams** will not be given without a valid medical excuse signed by a licensed physician or the student is in compliance with the Religious Holy Days policy given below.

16. GRADING PLAN

The official grades and calculations are maintained off-line. Only the official grades are used to calculate the final course grade. The average course grade is calculated using the following formula:

$$\text{Avg} = \frac{1}{4}(\text{MT1} + \text{MT2} + \text{HW} + \text{F})$$

After obtaining the average, letter grades will be assigned according to the following scale:

A	$90 \leq \text{Avg} \leq 100$
B	$80 \leq \text{Avg} < 90$
C	$70 \leq \text{Avg} < 80$
D	$60 \leq \text{Avg} < 70$
F	$\text{Avg} < 60$

Be aware: an average of 79.99999999999999999 is a "C."

Course Schedule

Physics 138 General Physics – Mechanics and Heat

Week	Date	Reading	Problems	Class Format
1	21Aug 2006			Introductory Lecture
	23 Aug 2006			Diagnostic Exam
2	28 Aug 2006	Sections 1.1 – 1.7	1.1, 1.3, 1.4, 1.7, 1.18, 1.30, 1.33, 1.35, 1.39, 1.47, 1.48	Lecture
	30 Aug 2006	Sections 1.8 – 1.9		Short Lecture, Recitation
3	4 Sep 2006	Sections 2.1 – 2.4	2.1, 2.4, 2.19, 2.21, 2.23, 2.25, 2.31, 2.44, 2.45	Lecture
	6 Sep 2006	Sections 2.5 – 2.6		Short Lecture, Recitation
4	11 Sept 2006	Sections 3.1, 3.2	3.5, 3.9, 3.11, 3.12, 3.13, 3.15, 3.17, 3.28, 3.30, 3.32, 3.33	Lecture
	13 Sept 2006	Sections 3.3, 3.4		Lecture
5	18 Sept 2006			Recitation
	20 Sept 2006			Midterm 1
6	25 Sept 2006	Sections 4.1 – 4.4	4.1, 4.2, 4.5, 4.7, 4.8, 4.11, 4.12, 4.13	Lecture
	27 Sept 2006			Short Lecture, Recitation
7	2 Oct 2006	Sections 4.5 – 4.6	4.15, 4.17, 4.23, 4.24, 4.25, 4.35, 4.46, 4.49, 4.54, 4.77	Lecture
	4 Oct 2006			Short Lecture, Recitation
8	9 Oct 2006	Sections 5.1 – 5.2	5.1, 5.3, 5.5, 5.6, 5.9, 5.11, 5.13, 5.14, 5.15, 5.18	Lecture
	11 Oct 2006	Section 5.3		Short Lecture, Recitation

9	16 Oct 2006	Sections 5.4 – 5.5	5.19, 5.23, 5.26, 5.29, 5.31, 5.33, 5.34, 5.59, 5.62	Lecture
	18 Oct 2006			Short Lecture, Recitation
10	23 Oct 2006	Sections 5.6 – 5.7	5.48, 5.50, 6.1, 6.3, 6.5, 6.6, 6.15, 6.19, 6.20	Lecture
	25 Oct 2006	Section 6.1 – 6.2		Lecture
11	30 Oct 2006			Recitation
	1 Nov 2006			Midterm 2
12	6 Nov 2006	Section 6.3-6.4	6.25, 6.27, 6.28, 6.30, 6.33, 6.41	Lecture
	8 Nov 2006	Section 6.5		Short Lecture, Recitation
13	13 Nov 2006	Section 7.1 – 7.6	7.1, 7.5, 7.20, 7.29, 7.31, 7.32, 7.33, 7.35, 7.55	Lecture
	15 Nov 2006			Lecture
14	20 Nov 2006	Section 9.1 – 9.7	9.1, 9.3, 9.7, 9.13, 9.18, 9.31	Short Lecture, Recitation
	22 Nov 2006			Thanksgiving – No Class
15	27 Nov 2006	Section 10.1 – 10.5	10.1, 10.5, 10.10, 10.14, 10.16, 10.37, 10.38, 10.43,	Lecture
	29 Nov 2006			Short Lecture, Recitation
16	4 Dec 2006	12.1 – 12.4	12.2, 12.4, 12.11, 12.17	Lecture
	6 Dec 2006			Short Lecture, Recitation
	As scheduled by University			Final Exam

University mandated parts of syllabi:

Student Syllabus Guidelines: You may find online a more detailed description of the following policies. These guidelines will also provide you with a link to the specific university policy or procedure:

http://www.shsu.edu/syllabus/

Academic Dishonesty: Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. *See Student Syllabus Guidelines*.

Classroom Rules of Conduct: Students are expected to assist in maintaining a classroom environment that is conducive to learning. Students are to treat faculty and students with respect. Students are to turn off all cell phones while in the classroom. Under no circumstances are cell phones or any electronic devices to be used or seen during times of examination. Students may tape record lectures provided they do not disturb other students in the process.

Student Absences on Religious Holy Days: Students are allowed to miss class and other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Students remain responsible for all work. *See Student Syllabus Guidelines*.

Students with Disabilities Policy: It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should visit with the Office of Services for Students with Disabilities located in the Counseling Center. *See Student Syllabus Guidelines*.

Visitors in the Classroom: Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office.