# **COURSE SYLLABUS**

# PHY138, SECTION 01

General Physics - Mechanics and Heat 3 CREDIT HOURS Summer 1 2008

#### 1. LOCATION OF CLASS MEETING

Room 107 of the Farrington Building

## 2. CLASS MEETING TIMES

Tuesday and Thursday between the hours of  $10^{00}$  and  $11^{50}$ . Due to the length of the class I would like to break it into two pieces:  $10^{00}$ - $10^{50}$  and  $11^{00}$ - $11^{50}$ .

## 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 936.294.1606 VOICE MAIL UNAVAILABLE
- 2) E-mail: crmeitzler@shsu.edu

## 6. OFFICE HOURS

Office hours for this course are at the following times:

Day	Time
Monday	$13^{00} - 15^{00}$
Tuesday	$13^{00} - 15^{00}$
Wednesday	$13^{00} - 15^{00}$
Thursday	$13^{00} - 15^{00}$
Friday	$13^{00} - 15^{00}$

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.

It is assumed that the student has sufficient knowledge of algebra and trigonometry to easily use these tools to solve a wide range of problems. Additionally, The student is assumed to have substantial experience with operating their calculator to obtain numerical results. Finally, it is assumed that the student has completed high school and has a knowledge of the material covered in the K-12 TEKS.

## 8. COURSE OBJECTIVES

The objectives of this course are set to meet the requirements imposed by the Texas Higher Education Coordinating Board's *Lower Division Academic Course Guide Manual* through the common course numbering system. The common course number for this class is PHYS 1301. To successfully complete this course, the student should be able to perform the following tasks:

- 1) State and understand the basic laws of classical mechanics including, but not limited to, Newton's laws of Motion, conservation of energy and momentum.
- 2) Use the laws of physics to conceptually analyze common physical situations
- 3) Understand the basic procedures of vector analysis and apply them to forces; momenta, and angular momentum.
- 4) State and understand the basic concepts of thermodynamics.
- 5) Use the Laws of Thermodynamics to understand the energy flow through a complex system.
- 6) Be able to use physics concepts to obtain numerical answers to a wide range of problems.

#### 9. REQUIRED TEXTBOOKS

The required book for this class is Serway/Faughn College Physics 7th ed.(Brooks/Cole, ISBN 0534997236). Students are required to acquire a copy of the textbook prior to the third class meeting.

#### 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 Federal regulations, attendance will be taken at every class by means of a sign-in sheet. The student will be required to sign the sheet. Failure to do so will result in an the student being considered absent for the class. Federal regulations, and University policy, require that the instructor reports the last day of attendance any time that a student drops or withdraws from a class.

# Attendance is not used to calculate the final course grade.

### 13. ASSIGNMENTS

Homework and reading assignments are assigned for each class. It is up to the student to complete these assignments, however, they **will not be turned in for grading**. Solutions will be provided on Blackboard.

## 14. HOMEWORK GRADES

Since homework problems will not be collected, there are no homework grading procedures for this class.

#### 15. EXAMS

There will be four exams for this course. All exams will consist of twenty problems that must be solved. Because of the nature of the subject, all exams are cumulative, although recent material will be emphasized. The final exam will be held at the time scheduled by the University. The scheduled dates for the midterm exams is given in the tentative schedule at the end of the syllabus.

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.
- **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 as a simple unweighted average of the exam grades.

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

 $90 \le A \le 100$ 

 $80 \le B < 90$ 

 $70 \le C < 80$ 

 $60 \le D < 70$ 

F < 60

# University mandated parts of syllabi:

**Student Syllabus Guidelines:** You may find on-line 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.