

COURSE SYLLABUS
PHY139, SECTION 01
SOUND, LIGHT, ELECTRICITY, AND MAGNETISM
3 CREDIT HOURS
Summer 2, 2008

1. LOCATION OF CLASS MEETING

Room 107 of the Farrington Building

2. CLASS MEETING TIMES

Monday through Friday between the hours of 8⁰⁰ and 9⁵⁰.

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 – 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 the follow-on to PHY138. It will cover the following topics: thermodynamics, electrostatics, magnetostatics, light, optics and waves. Other topics may be covered if time permits. Student performance will be assessed via three exams and a final exam. 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 round out your knowledge of physics. You will need to learn the basic concepts. Ideally, you should be able to apply your knowledge to an assortment of practical problems.

9. REQUIRED TEXTBOOKS

This course uses the same textbook that you used in PHY138. You should have this book from your previous semester. **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 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 problems will not be collected during this session; therefore, there will not be a homework grade.

15. EXAMS

There will be four exams for this course: three 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	18 July 2008
MT2	24 July 2008
MT3	31 July 2008
F	7 August 2008

The following additional rules and conditions apply:

- 1) **Attendance at exams is mandatory.** Failure to attend will result in the grade of zero.

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.

Schedule -Phy139 -Summer2

Monday, July 07, 2008
12:01 PM

July 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8 H1:Gases H2:Heat & Work	9 H1:1st Law of thermodynamics H2:	10 H1:2nd Law of Thermodynamics H2:	11 H1:Entropy H2:Waves 1	12
13	14 H1: Waves 2 H2: Waves 3	15 H1: Sound 1 H2: Sound 2	16 H1: Sound 3 H2: Sound 4	17 H1: Charge and Electricity H2: Coulomb's Law	18 Midterm 1	19
20	21 H1: Electric Field H2: Gauss' Law	22 H1: Electrostatic Potential H2: Capacitance	23 H1: Electric Currents H2: Resistance and Ohm's Law	24 Midterm 2	25 NO CLASS	26
27	28 H1: Magnetism H2: Magnetic force on a charge	29 H1: Magnetic force on a Wire H2: Ampere's Law	30 H1: Faraday's Law H2: Inductance	31 Midterm 3		

August 2008

sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 NO CLASS	2
3	4 H1: Magnetic energy storage H2: EM Field	5 H1: Mirrors H2: Snell's Law	6 H1: Simple Lenses H2:	7 Final Exam	8	9