

COURSE SYLLABUS
PHY466, SECTION 01
QUANTUM MECHANICS
3 CREDIT HOURS
Fall 2007

1. LOCATION OF CLASS MEETING

Room 205 of the Farrington Building

2. CLASS MEETING TIMES

Monday, Wednesday, and Friday 11⁰⁰ - 11⁵⁰.

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	13 ³⁰ - 14 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 a follow-on to PHY391, Modern Physics. The previous course introduced modern physics in a phenomenological way. In this course, we will develop the theoretical toolkit needed to gain a deeper understanding of quantum theory. The student is expected to have a working knowledge of partial differential equations, matrices, and integral transforms to successfully complete this course.

8. COURSE OBJECTIVES

To pass this course the student should be able to perform calculations related to quantum theory. The student should be able to think about quantum mechanics in abstract form and recognize how to apply the theory to real problems.

9. REQUIRED TEXTBOOKS

R.L. Liboff, **Introductory Quantum Mechanics**, 4th ed. (Addison Wesley, Boston, 2003)

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 problems. Homework will be assigned as we progress through the semester. The problems are due one week after being assigned.

HOMEWORK WILL NOT BE ACCEPTED AFTER 17⁰⁰ OF THE ASSIGNED DUE DATE. THIS IS A RULE THAT WILL BE RIGOROUSLY ENFORCED. IT IS A BINARY PROBLEM – IT IS EITHER ON-TIME OR NOT.

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	
MT2	2 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

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.