

PHYSICI 101 Syllabus

Spring Semester 2012

Instructor: Teresa Ciardi

E-Mail: teresa.ciardi@canyons.edu

Note: I reserve the right to make amendments to the syllabus if needed.

Office Hours:

M, W	8:15 – 9:15 am	CCC 507
T, Th	2:00 – 2:30 pm	ALLB 111
T	4:00 – 5:00 pm	SECO 306C except when Division Meeting
F	by appointment	SECO 306C

Web Site: <http://www.canyons.edu/faculty/ciardit>

E-Mail Instructions: Subject must read, “**PHYSICI 101**”. Emails not so identified will be deleted without being read.

Required Materials:

- Scientific Calculator (not a phone)
- 3 x 5 index cards
- Text: “Conceptual Physical Science” custom 4th edition, by Hewitt, Suchocki, and Hewitt
- “Conceptual Physical Science” custom lab manual by Teresa Ciardi
- Composition Book (preferably with graph paper pages)

Student Learning Outcome: Analyze the general principles and methods of scientific inquiry including fundamental concepts of both chemistry and physics.

About the Course: We will explore the sciences of physics and chemistry, and the role these sciences play in everyday life on Earth; some applications in astronomy will also be included. Lecture notes and homework assignments will be available on my web site. It is your responsibility to check the web site regularly for updates. In class discussions will be based on expected text reading and lecture notes.

The objectives of this course are for you to:

- ❖ Examine the physical properties that are present in your daily life
- ❖ Recall and apply the basic concepts of chemistry and physics
- ❖ Develop scientific thinking and problem solving skills
- ❖ Practice the scientific method in a laboratory setting

Attendance: Your attendance to both lecture and lab is required. If you miss **3 consecutive days**, then **you will be dropped** from the course.

Laboratory: There is a separate syllabus for the lab portion of this class.

Homework: No late homework will be accepted. Homework is due at the **beginning** of lecture one week from completed coverage of a chapter, unless otherwise notified; you will not be allowed to complete homework during class time. Each chapter of homework is worth **10 points total**.

Homework is complete
Random items are correct

6 points possible
4 points possible

Homework Requirements:

Homework requirements must be followed, or your homework will not be graded.

- Homework must be neat and complete. If you cannot print neatly, then you must type your homework.
- Each item in the homework assignment must be attempted.
- **Homework must be stapled before class.**
(Each chapter of homework must be submitted as an individual document.)
- **All work must be shown for problems.** You will not receive credit for writing the correct answer. It is the process that will be graded.

Index Cards: You may earn extra homework points if you are present when an “Index Card Question” is posed. You must have the correct size index card to participate.

Tests: Each exam will consist primarily of multiple-choice questions, with some short answer questions, and some word problems. If you must miss a test, then your grade on the final will be used for the missed test. If any additional tests are missed, a zero will be given. No make-up exams will be given for any reason.

Final Exam: The final exam is cumulative. Your lowest test score may be replaced by a higher final exam score. The final exam date will not be changed for anyone’s flight schedules!

Science Project: Each student is required to do a scientific project related to the topics studied in this course, and present the project in class. Presentations should be 3-5 minutes. Project ideas must be pre-approved by me prior to the 3rd exam, or you will receive a zero for the project. Science project topics must be submitted on a standard piece of paper with name of experiment and the physics or chemistry concept you plan to present.

Example **Experiment: “Colorful milk”**
Physics topic: Surface tension

The project is worth **10 points total**; criteria used to evaluate projects include:

- | | |
|---|--------------------------|
| 1. Demonstrates complete understanding of concept | 5 points possible |
| 2. Shows or clearly describes experiment and results | 3 points possible |
| 3. Utilized the scientific method | 1 point possible |
| 4. Gives comprehensible presentation | 1 point possible |

Important Note: *You must be in attendance for all project presentations in order to receive full credit for your presentation.*

Descriptions of Science Project Criteria:

1. Complete understanding means that you give a thorough description of the physics or chemistry involved in your experiment. If any physics or chemistry terminology is used, you must explain the meaning of this terminology.
2. You may present **your** experiment in any way you wish. **You must do some type of experiment.** Showing an experiment that someone else did on you tube will result in a zero for the project. The mode of presentation (power point, in person, “You Tube”, etc.) is up to you.
3. You must have a hypothesis, an experiment or an observation, data and/or results, and a scientific conclusion.
4. You will not need to memorize your presentation, but you should be very familiar with it. If you are searching an internet printout for information or speak so rapidly that no one can follow you, then you will not receive this point.

Questions: Please ask questions! All relevant questions are welcome, so please interrupt me whenever you have one.

Grading:

Tests (3)	45% (15% each)	A	90-100%
Final Exam	20%	B	80-89%
Homework	10%	C	70-79%
Science Project	5%	D	60-69%
Laboratory	20%	F	0-59%

Classroom Behavior: The basic rule for behavior in the classroom and laboratory is to be respectful to your classmates and instructor at all times. Use of electronics, talking with classmates during lecture, sleeping, texting, and rude comments, are a few examples of behavior that is not respectful of others and will result in your immediate removal from the class. Any student removed from class will be reported to COC officials and will not be allowed to return until cleared by Student Services (Administration Building room 109).

Message: Plan to work hard all semester; that means from day one. Many of the concepts we will learn later, build on the concepts we will learn at the beginning of the course. Thus, if you wait until mid-way through the class to start working hard, you may find yourself very lost. There will be no opportunity for last minute extra credit work.

Science is fun!

Final Note: All graded materials not retrieved by students will be thrown away before the final exam; the final exam will be kept for 2 semesters.