Course Number: PHYS 1402 laboratory

Course Title: General Physics 1402

Course Credit Hours: 4    Lecture Hours: 3    Lab Hours: 3

Prerequisite: PHYS 1401 within the last five years with a “C” or better. A course that included trigonometry is highly recommended.

Corequisite: none

Course Delivery Method: Laboratory. Student will apply theory learned in the lecture to a series of selected experiments. Students will collect data in small groups and submit written reports of their reports. The written reports will consist of both standard lab reports as well as formal reports as explained in the lab addendum.

Instructor’s Information:
Instructor’s Name: M. L. Broyles
Office Number: J139
Office Hours: See syllabus addendum.

Contact Information: Dr. Fred Jury: Department Chair. 972-881-5883
Dr. Cameron Neal: Dean of Math and Science: 972-881-5880

Class Information: Refer to syllabus addendum

Class Meeting Times:
Class Meeting Location:

Textbook: Refer to syllabus addendum

Supplies: Refer to syllabus addendum

Measurable Student Learning Outcomes:

Upon successful completion of this course, students should be able to do the following:

1. Demonstrate the proper collection, analysis, and reporting of scientific data.
2. Write an acceptable report on data collected in the laboratory.
3. Demonstrate how to set-up and operate a basic dc electrical circuit.
4. Apply theory using voltage, current, and resistance in electrical circuits.
5. Apply theory involving magnetism and electromagnetism in electrical circuits.
6. Set-up and monitor a circuit using ac electricity.
7. Understand and apply theory using the basic laws of reflection and refraction.
8. Apply theory including ray diagrams involving mirrors and lenses.
9. Understand how to take measurements using a Geiger counter.
10. Work successfully in small laboratory groups to collect acceptable scientific data.

**Course Requirements:**
Complete the lab activities as defined in the lab addendum.

**Attendance Policy:**
Regular laboratory attendance is required of all students; excused absences, including illnesses, should be cleared with the instructor. Please see the Registration Guide for the last day to withdraw. Religious Holy Days: refer to the current Collin Student Handbook.

**ADA Statement:**
It is the policy of Collin County Community College to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal and state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student’s responsibility to contact the ACCESS office, SCC-G200 or 972.881.5898, (V/TTD: 972.881.5950) in a timely manner to arrange for appropriate accommodations.

**Academic Ethics:**
The College District may initiate disciplinary proceedings against a student accused of scholastic dishonesty. Scholastic dishonesty includes, but is not limited to, statements, acts, or omissions related to applications for enrollment or the award of a degree, and/or the submission as one’s own work material that is not one’s own. Scholastic dishonesty may involve, but is not limited to, one or more of the following acts: cheating, plagiarism, collusion, use of annotated texts or teacher’s editions, and/or falsifying academic records.

**Plagiarism** is the use of an author’s words or ideas as if they were one’s own without giving credit to the source, including, but not limited to, failure to acknowledge a direct quotation.

**Cheating** is the willful giving or receiving of information in an unauthorized manner during an examination, illicitly obtaining examination questions in advance, copying computer or internet files using someone else’s work for assignments as if it were one’s own, or any other dishonest means of attempting to fulfill the requirements of a course.

**Collusion** is intentionally aiding or attempting to aid another in an act of scholastic dishonesty, including but not limited to, providing a paper or project to another student; providing an inappropriate level of assistance; communicating answers to a classmate during an examination; removing tests or answer sheets from a test site, and allowing a classmate to copy answers.

**Tentative Course Calendar:** *(See the lecture addendum)*

NOTE: A copy of the generic/departmental syllabus is available on the college website at:
http://iws.ccccd.edu/syllabus