

**COLLIN COUNTY COMMUNITY COLLEGE  
COURSE SYLLABUS - Lecture**

**COURSE NUMBER:** PHYS 1402

**COURSE TITLE:** General Physics II

**CREDIT HRS:** 4      **LECTURE HRS:** 3      **LAB HRS:** 3

**PREREQUISITE:** PHYS 1401 within the last five years with a C or better

**COREQUISITE:** Lab

**COURSE DESCRIPTION:**

A continuation of Physics 1401. Includes electricity, magnetism, light, optics, relativity and atomic physics. Lab required.

**MEASURABLE STUDENT LEARNING OUTCOMES:**

Upon successful completion of this course, students will be able to:

1. Apply the concepts of static electrical charge to problems involving Coulomb's Law and electric fields
2. Solve problems involving the concepts of electrical potential energy, electrical potential energy difference, and potential
3. Apply the concepts of capacitance and electrical power by solving problems
4. Solve problems utilizing Ohm's Law and electrical resistance
5. Apply Kirchhoff's laws to electrical circuits
6. Apply the concepts of magnetism and electromagnetism to electrical circuits
7. Solve problems using the principles of alternating current
8. Understand and apply the principles of geometric optics
9. Explain and apply the concepts pertaining to optical instruments
10. Develop an understanding of the various applications of modern physics including: relativity, quantum theory, quantum mechanics, nuclear structure, radioactivity, and fission and fusion

**COURSE REQUIREMENTS:**

Complete lecture and lab activities

**COLLEGE REPEAT POLICY:**

A student may repeat this course only once after receiving a grade, including “W.”

**ATTENDANCE POLICY:**

May vary by instructor. See the current *Collin Registration Guide* for the last day to withdraw.

**RELIGIOUS HOLY DAYS:**

Please refer to the current *Collin Student Handbook*.

**ADA STATEMENT:**

It is the policy of Collin County Community College to provide reasonable and appropriate accommodations for individuals with documented disabilities. This College will adhere to all applicable Federal and State 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 (G-200) or 972.881.5898, (TDD- 972.881.5950) in a timely manner if he/she desires to arrange for accommodations.

**ACADEMIC ETHICS:**

The college 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 of material as one’s own work that is not one’s own. Scholastic dishonesty may involve one or more of the following acts: cheating, plagiarism, collusion, and/or falsifying academic records.

**CHEATING:**

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

**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. Contact the Dean of Students at 972.881.5771, for the student disciplinary process and procedures or consult the CCCCD Student Handbook.

**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 answers from a test site, and allowing a classmate to copy answers.