

**Ivy Tech Community College, Richmond  
General Education Program**

**Course Title: Physical Science  
SCI 111-12, Internet  
Fall, 2005**

**Credit Hours: 3**

**Instructor: Terry St. John**

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(leave message)**

**Instructor's E-mail: [tstjohn@ivytech.edu](mailto:tstjohn@ivytech.edu)**

**Mailing Address: Ivy Tech State College, 2325 Chester Blvd.,  
Richmond, IN 47374**

**Required Texts:**

**Krauskopf and Beiser. *The Physical Universe, 11<sup>th</sup> edition.*  
2006**

**ISBN 0-07-250979-1**

**Study Guide for use with *The Physical Universe, 11<sup>th</sup> edition.*  
2006**

**ISBN 0-07-297993-3**

# COLLEGEWIDE COURSE OUTLINE OF RECORD

## SCI 111, PHYSICAL SCIENCE

COURSE TITLE: Physical Science

COURSE NUMBER: SCI 111

PREREQUISITES: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENG 025 Introduction to College Writing II, ENG 032 Reading Strategies for College II and MAT 050 Basic Algebra

DIVISION: General Education

PROGRAM: General Education

CREDIT HOURS: 3

CONTACT HOURS: Internet Class

DATE OF LAST REVISION: Spring, 2004

EFFECTIVE DATE OF THIS REVISION: Summer, 2005

CATALOG DESCRIPTION: Introduces physical concepts and theories pertaining to current applications and trends in physics. Basic concepts in chemistry, earth science and astronomy will also be illustrated. Emphasizes concepts and applications.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Apply the scientific method of inquiry, including analysis based on scientific concepts and observation.
2. Use and convert physical quantities and measurements in both the SI and USCS units systems.
3. Describe the history and origins of scientific concepts and principles.
4. Solve elementary problems in kinematics and dynamics: motion, force, friction, gravitation, energy, heat, work, power, and simple machines.
5. Solve elementary problems involving vibrations, waves, and sound.
6. Solve elementary problems involving electricity and electromagnetism.
7. Illustrate basic scientific concepts in areas such as chemistry.
8. Illustrate select topics in earth science and astronomy.

### **COURSE CONTENT: Topical areas of study include –**

Work and energy

Mechanics

Thermal physics

Waves and sound

Electricity

Newton's laws of motion

Measurements in physical science

Chemistry

Selected topics from earth science and astronomy

Laboratory experiments will be selected from the topics above.

## ATTENDANCE:

Class attendance is necessary for attainment of the objectives of the course. As this is an Internet based course, attendance can't be handled in the traditional way. You will be required to email me each week, with the week defined as Monday at 12:01 am to Sunday at 11:59 pm. This check-in is required to assure me that you are keeping the class in mind each week and don't fall behind. If you email homework to me, take a test, or contact me by email for any other reason, that will count as your check-in for the week.

If you fail to check in 4 times you will receive an F for the class.

## COURSE SCHEDULE AND CONTENT SUBJECT TO CHANGE AT THE INSTRUCTOR'S DISCRETION.

LAST DAY TO DROP COURSE WITHOUT GRADE: November 11, 2005

## STUDENT ASSESSMENT, GRADING, AND MAKE-UP POLICY:

Tests will cover material defined in the class schedule and/or by the instructor. You will be given a one week time frame to take a test at the testing/learning resource center nearest you. If you can't take a test during the assigned week, you must notify the instructor before the week is over in order to have a chance to have the time extended. The instructor will determine if the reason for missing the test is valid. "I wasn't ready" is not a valid reason! If notification is not received prior to the end of the test week, a deduction of 10% will be made from the student's score if taken within 7 days (for example, a 93% will become an 83%). There will be no further extensions beyond that and you will receive a "0" for the test. The instructor reserves the right to give an alternate makeup test.

For late lab/homework assignments, 10% of the total points available will be deducted if up to one week late. None will be accepted beyond that and a "0" will be assigned.

There will be no lab/homework assignments accepted after December 7, 2005. The last test must be completed by December 14, 2005.

## GRADING

The tests will comprise 60% of the final grade and the lab/homework assignments will be 40%. All grades will be posted on Blackboard so that you can check your status at any time. Calculate your course average as follows:

$$\frac{\text{Test score total}}{\text{Total test points possible}} \times 60 = \mathbf{A}$$

$$\frac{\text{Lab/homework score total}}{\text{Total lab/homework points possible}} \times 40 = \mathbf{B}$$

$$\mathbf{A + B = Course Grade}$$

### GRADING SCALE:

90-100%	A
80-89%	B
70-79%	C
60-69%	D
Below 60%	F

### ACADEMIC HONESTY STATEMENT:

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement.

Cheating on papers, tests or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

### ADA STATEMENT:

Ivy Tech State College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, please contact the Office of Disability Support Services.

If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classroom.