



Faculty Name:	
Course Information:	INTRODUCTION TO PHYSICS II: SCI 162
Course Section, Term and Year:	
Course Meeting Times & Location:	

Contact:

Phone Number:	
Office Location:	
Email address:	
Enter days/time you are available to meet with students.	

Netiquette

Respect the diversity of opinions among the instructor and classmates and engage with them in a courteous, respectful, and professional manner. All posts and classroom communication must be conducted in accordance with the student code of conduct. Think before you push the Send button. Did you say just what you meant? How will the person on the other end interpret the words?

Communication:

Faculty Communication with Students:

Discuss how faculty will contact students.

Student Communication with Faculty:

Discuss how students will contact faculty when they have questions or concerns.

## Course Description:

### SCI 162 Introduction to Physics II

2-3-3

This is one of a two-course sequence in physics, designed for technology students and other non-science majors. The course uses lectures, supported by laboratory investigation, to achieve a hands-on, practical approach to understanding important concepts and physical laws of nature. Topics include heat and thermodynamics, vibrations and waves, sound, basic electricity and magnetism, electromagnetic waves, geometric and wave optics, atoms and spectra, and atomic nuclei and nuclear energy. *Prerequisites: High school algebra, MAT 040 or equivalent, or permission of Instructor. (SCI 161 recommended, but not required for SCI 162). General Education: N.*

## Course Learning Outcomes:

Students will be able to:

- Demonstrate a basic understanding of the scientific method in lab experiences to conduct experiments, interpret information and draw conclusions.
- Demonstrate the ability to think critically and employ critical thinking skills in solving problems in fluid mechanics, waves and sound, thermodynamics, and electricity.
- Demonstrate the quantitative skills needed to succeed in an algebra-based physics course.
- Demonstrate an understanding of the impact of physics on society.
- Demonstrate the ability to make connections between concepts across physics.
- Draw, read and interpret graphs and data.
- Demonstrate the safe and proper use of physics instrumentation in the physics laboratory to make careful observations and measurements, organize data, provide analysis and synthesis of observations and data, and present laboratory reports that are well organized and well written.

## General Education Learning Outcomes:

Students will demonstrate the following:

- Understanding of the methods scientists use to explore natural phenomena, including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of mathematical analysis; and
- Application of scientific data, concepts, and models in one of the natural sciences.

## Program Learning Outcomes:

Students will:

- Demonstrate the safe and proper use of scientific instrumentation, measuring devices, chemical reagents, media, and/or tools of science in a laboratory setting.
- Demonstrate communication, problem solving and critical thinking skills pertinent in the healthcare sector.
- Understand and utilize scientific method.
- Promote health and wellness among members of the college and/or local communities through service learning.

## Course Resources:

Textbook:	Enter title, edition, author, ISBN for required text.
Materials:	Enter all additional required materials and tools needed to complete course here.
Access:	List access codes needed for websites or other software. .

### *Course Policies:*

Click here to describe how students will participate in your class. Include policies regarding missed exams, makeup exams, extra credit assignments, late assignments, missed assignments, etc.

### Course Delivery:

#### *Course Content:*

#### *Lecture Format:*

#### *Student Expectations specific to this course:*

## Course Outline and Schedule

### Grading Method:

Click here to enter a clear explanation of how students will be evaluated, including a description of course assessments and a statement of the assessment process and measurements. Include weight/percentages for quizzes, exams, papers, projects, homework, attendance, participation, etc.

### Grading Scale:

Letter	Grade Range
<b>A</b>	Enter range for A.
<b>A-</b>	Enter range for A-.
<b>B+</b>	Enter range for B+
<b>B</b>	Enter range for B.
<b>B-</b>	Enter range for B-
<b>C+</b>	Enter range for C+.
<b>C</b>	Enter range for C.
<b>D</b>	Enter range for D.
<b>F</b>	Enter range for F.

## Earn an FMCC Micro-credential Badge:

Check this link to see if this course meets a requirement for an FM Micro-credential Badge:

<https://www.credly.com/organizations/fulton-montgomery-community-college/badges>