

Course: PHYS 10                                      Division: 10                                      Also Listed As:

Term Effective: 200930, INACTIVE COURSE

Short Title: TECHNICAL PHYSICS

Full Title: Technical Physics

<u>Contact Hours/Week</u>	<u>Units</u>	<u>Number of Weeks</u>	<u>Total Contact Hours</u>
Lecture: 2	2	17.34	Lecture: 34.68
Lab: 0			Lab: 0
Other: 0			Other: 0
Total: 2			Total: 34.68

Credit Status: D - Credit - Degree Applicable

Grading Modes: L - Standard Letter Grade

Repeatability: Repeatability: N - Course may not be repeated

Schedule Types: 02 - Lecture and/or discussion

Course Description:

Designed to combine a series of technical applications such as those used in industry with a sequence of basic physical principles such as mechanics, heat, light and electricity.  
 ADVISORY: Mathematics 205

## ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 199750

UC TRANSFER:

Not Transferable

PREREQUISITES:

COREQUISITES:

STUDENT LEARNING OUTCOMES:

1. To attain the proficiency in applying the basic principles of physics requisite to a technical career.

TOPICS AND SCOPE:

Inactive Course: 12/08/2008

1	2	Introduction to Physics
2	2	Measurement
3	2	Newton's Laws
4	2	Newton's Laws
5	2	Newton's Laws
6	2	Work and Energy
7	2	Work and Energy
8	2	Sound
9	2	Sound Applications
10	2	Thermodynamics
11	2	Electricity
12	2	Electricity
13	2	Electromagnetism
14	2	Atomic Structure
15	2	Light Energy
16	2	Nuclear Structure
17	2	Review
18	2	FINAL EXAM

COURSE OBJECTIVES:

The student will be able to demonstrate a technical knowledge of the basics of engineering physics utilizing a minimum of advanced mathematics and a maximum of applied principles.

They shall be able to demonstrate this proficiency by making a passing grade on tests based on the level of the problems in our textbook, and further by demonstrating their ability to make and demonstrate working models of engineering-industrial equipment.

METHODS OF INSTRUCTION:

There will be approximately two hours of demonstration/lecture per week and one hour per week of "hands-on" work by the students.

REPRESENTATIVE TEXTBOOKS:

Ernest Zebrowski, ^uPhysics for Technicians^s

SUPPLEMENTAL DATA:

Basic Skills: N

Classification: I

Noncredit Category: Y

Cooperative Education:

Program Status: 2 Stand-alone

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department: PHYS

CSU Crosswalk Course Number: 10

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: E

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000456153

Sports/Physical Education Course: N

Taxonomy of Program: 190200