

Course: PSCI 200 Division: 10 Also Listed As:

Term Effective: 200930, INACTIVE COURSE

Short Title: INTRO TO TECHNOLOGY

Full Title: Introduction to Technology

<u>Contact Hours/Week</u>	<u>Units</u>	<u>Number of Weeks</u>	<u>Total Contact Hours</u>
Lecture: 1	2	17.34	Lecture: 17.34
Lab: 3			Lab: 52.02
Other: 0			Other: 0
Total: 4			Total: 69.36

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:

An introduction to technology in manufacturing, energy production and distribution, communication, business, health occupations, service industry, agriculture, and transportation. Laboratories will emphasize the technology needs of business and industry.

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Not Transferable

UC TRANSFER:

Not Transferable

PREREQUISITES:

COREQUISITES:

STUDENT LEARNING OUTCOMES:

1. Assess the impact of technology on society and the environment.
2. Develop an appreciation for own interests and skills in the areas of technology discussed.
3. Gain ability to solve problems involving technology in the work place.
4. Work as part of a team.
5. Use measurement instruments common to science, business, and industry.

TOPICS AND SCOPE:

Inactive Course: 12/08/2008

1-2 2 Module 1: Introduction to Technology

6 Labs 1 & 2: Measurements and Instrumentation

3-4 2 Module 2: Introduction to Communication

6 Labs 3 & 4: Computers as a Communication Link;
Report Presentation.

5-6 2 Module 3: Introduction to Manufacturing

6 Labs 5 & 6: Design and build a working copy of a
common small device (e.g. electric motor, CO2
powered car, tool, etc.)

7-8 2 Module 4: Introduction to Energy, Power and
Transportation.

6 Labs 7 & 8: Design and execute a transportation
system to visit Gilroy Foods cogeneration facility.

9-10 2 Module 5: Introduction to Agriculture and Agri-
business.

6 Labs 9 & 10 Plant Growth. Site visit to seed
company.

11-12 2 Module 6: Introduction to Health Occupations.

6 Labs 11 & 12: Science, Technology and Business in
the Health Occupations.

13-14 2 Module 7: Introduction to Business and Information
Management.

6 Labs 13 & 14: Product Marketing and Sales.

15-16 2 Module 8: Personal Assessment.

6 Labs 15 & 16: Develop a Career/Education Plan.

17 8 Report Presentation.

Out-of-class assignments will include homework problems, readings
and reports that will exceed 2 hours per lecture unit granted.

COURSE OBJECTIVES:

At the conclusion of this course the student will be able to

understand and use the following:

1. Discuss the role of technology in business and industry. Discuss the interrelationships between technology, society and the environment.
2. Be able to measure and record data using basic instruments such as rulers, meter sticks, micrometers, calipers, digital multimeters and oscilloscopes.
3. Gain familiarity with the team concept of project completion, conflict resolution, and the oral and written communication of project status and results.
4. Understand responsibilities of being a team member. Be able to communicate effectively the results of a project. Discuss the use on computers in business and industry.
5. Demonstrate understanding of quality management methods. Discuss budget concerns of design and manufacture process.
6. Discuss the conversion of energy into power. Discuss the transmission, storage and distribution of power. Compare and contrast various transportation systems and discuss their feasibility based upon needs of the population.
7. Discuss energy production and transmission. Discuss environmental impact of various transportation methods and methods of energy production. Present transportation plan.
8. Discuss biotechnology (e.g. chemicals, heavy equipment, irrigation, etc.) Discuss the environmental concerns related to modern farming methods. Compare and contrast production methods.
9. Discuss parameters controlling yield of harvest. Discuss role of technology in development and marketing seeds.
10. Discuss the opportunities available in the health occupations. Discuss the role of business and technology in the health industry.
11. Discuss human body as a machine (e.g. blood pressure, pulse, muscle forces, electrical signals). Discuss use of instruments and their development (e.g. stethoscopes, blood pressure cuffs, ultrasound, EKG, etc.). Discuss impact of business and government in health care delivery.
12. Discuss the opportunities available in the business occupations. Discuss the development of small businesses. Discuss the impact of decisions on financial stability. Compare and contrast information management systems.
13. Discuss the feasibility and strategy for producing and marketing a product.
14. Assess goals within the introductory framework presented in modules 1-7.
15. Compare and contrast goals with existing skills and background. Prepare an outline for completing coursework to achieve goals.

METHODS OF INSTRUCTION:

Lecture/discussion. Site visits to businesses. Guest Lecturers. Laboratories will emphasize applications of technology, team work and problem solving.

REPRESENTATIVE TEXTBOOKS:

To be selected.

SUPPLEMENTAL DATA:

Basic Skills: N
Classification: A
Noncredit Category: Y
Cooperative Education:
Program Status: 1 Program Applicable
Special Class Status: N
CAN:
CAN Sequence:
CSU Crosswalk Course Department:
CSU Crosswalk Course Number:
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: CCC000017255
Sports/Physical Education Course: N
Taxonomy of Program: 190100