ALTW 434: CAREER PATH EXPLORATION: STEM CAREERS FOR STUDENTS WITH LEARNING DIFFERENCES

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Fall 2024
Units:	0
Hours:	2 lecture per week (24 total per quarter)
Degree & Credit Status:	Non-Degree-Applicable Non-Credit Course
Foothill GE:	Non-GE
Transferable:	None
Grade Type:	Non-Credit Course (Receives no Grade)
Repeatability:	Unlimited Repeatability

Student Learning Outcomes

- Student will develop skills inherent to long term project processes. These skills include time and project management, individual efficacy, and self regulation.
- Student will learn basic information about different career paths in STEM fields, including education and experience requirements for entry.

Description

Specifically designed for students with learning differences, this course aims to broaden student's horizons and inspire them to consider careers in Science, Technology, Engineering, and Mathematics (STEM). Through a combination of experiential learning and guest lectures, students will gain valuable insights into various STEM fields. The curriculum emphasizes hands-on activities, interactive projects, and real-world scenarios to provide a practical understanding of STEM concepts. The guest lectures, featuring professionals from diverse STEM backgrounds, offer students the opportunity to connect with role models and explore potential career paths. By the end of the course, participants will have a clearer understanding of possibilities within STEM and the confidence to pursue their interests in these dynamic fields.

Course Objectives

The student will be able to:

1. Articulate and understand future career paths available to them in STEM fields.
2. Demonstrate basic knowledge of computer components and programming languages.
3. Communicate with stakeholders in STEM fields.
4. Work in a group environment to effectively complete technical tasks.

Course Content

1. Career exploration
   a. Guest lectures
   b. Career path options
   c. Minimum qualifications and education requirements
   d. Job searching skills
2. Computer programming
   a. Vocabulary and component identification
   b. Basic device assembly
   c. Programming
   d. Troubleshooting and testing
3. Communication skills
   a. Introductions and networking
   b. Appropriate work/school behavior
4. Group work
   a. Teamwork
   b. Leadership
   c. Following instructions
   d. Conflict resolution

Lab Content

Not applicable.

Special Facilities and/or Equipment

Dedicated classroom space to support long-term experiential learning projects; technology tools as applicable.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Instructor observation
Group projects
Final project
Presentations

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

Lecture
Individual and group research
Project-based learning
Cooperative experiential education

Representative Text(s) and Other Materials

No outside course materials required.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

1. Short paragraph response to discussion questions
2. Visits to organizations in the community related to STEM fields
3. Presentations

Discipline(s)

Adapted Computer Technology: Disabled Students Programs and Services OR Computer Information Systems OR Developmental Disabilities: Disabled Students Programs and Services OR Robotics OR Specialized Instruction (Disabled Student Programs and Services): Vocational Noncredit