

Prepared by: D. Thornsberry Reviewed by: K. Bandy

Date reviewed: September 27, 2016 C & GE approved: November 14, 2016 Board approved: December 14, 2016

Semester Effective: Fall 2017

Industrial Education Safety (IES) 2000 Occupational Safety & Health Capstone (3 Units) CSU

Prerequisite: Completion of all other required courses in the Occupational Safety and Health program. Must be in appropriate standing and in final semester of the Associate Degree Program.

Advisory: Eligibility for ENGL 1500 and MATH 1060 strongly recommended.

Total Hours: 48 hours lecture

Catalog Description: This final course is designed to be the culminating project to a specific field of study such as Occupational Safety & Health and Energy Technology. Professional and employment related situations and projects will be explored through a variety of learning methods to include simulations, case studies, scenarios, individual research papers, projects, internships, portfolios and presentations necessary for success in an Industrial Technology setting. Projects will be based on need and/or interest related to the discipline or profession and agreed upon between the instructor and the student.

Type of Class/Course: Degree Credit

Recommended Text:

29 CFR 1926 OSHA Construction Industry Regulations. Mancomm, 2012.

29 CFR §1910 General Industry Regulations. MANCOMM: Davenport, Iowa, 2016

State of California General Industry & Electrical Safety Orders. MANCOMM: Davenport, Iowa. 2016

State of California Cal-OSHA Construction and Electrical Safety Orders. MANCOMM .: Davenport, Iowa, 2016. Print.

Supplemental Material: Handouts from instructor

Course Objectives:

By the end of this course, a successful student will be able to:

- 1. apply technical skills to situations and research,
- 2. synthesize theory and facts into plans and projects,



- 3. design and create possible solutions to workplace challenges
- 4. propose and defend a technological solution,
- 5. demonstrate the ability to research current workplace issues and provide an analysis of theories and issues involved, and
- 6. present a formal report and/or project detailing a problem, its dimensions, possible solutions and rationale for them, recommendation with justification, and an implementation and evaluation plan.

Course Scope and Content:

Unit I Introduction

A. Overview

Unit II Design of Project

- A. Research
- B. Study
- C. Design of Project

Unit III Development

- A. Development of Project
- B. Implementation of Project
- C. Presentation of Project
- D. Report

Learning Activities Required Outside of Class:

The students in this class will spend a minimum of 6 hours per week outside of the regular class time doing the following:

- 1. Crafting an appropriate bibliography to support the project
- 2. Reading the required text and other background materials for class
- 3. Answering questions
- 4. Studying class materials and notes
- 5. Performing literature searches
- 6. Problem solving activities and exercises
- 7. Preparing projects
- 8. Working on group exercises
- 9. Using technological skills to create programs in Industrial Technology

Method of Instruction:

- 1. Orientation sessions with instructor
- 2. Lecture and discussion
- 3. Group activities
- 4. Role-playing and practice exercises
- 5. Demonstrations



Hands-on use of technology 6.

Methods of Evaluation:

- Written assignments 1.
- 2. Participation

 - Role-playing and group activities
 Oral presentations and demonstrations
 Scenario reflections b.
 - c.
- 3. **Projects**
 - Multimedia presentations
 - Formal written reports b.
 - Portfolios c.
 - Project design and implementation d.
 - Samples

Supplemental Data:

TOP Code:	086000: Educational Technology
SAM Priority Code:	B: Advanced Occupational
Distance Education:	Not Applicable
Funding Agency:	Y: Not Applicable(funds not used)
Program Status:	1: Program Applicable
Noncredit Category:	Y: Not Applicable, Credit Course
Special Class Status:	N: Course is not a special class
Basic Skills Status:	N: Course is not a basic skills course
Prior to College Level:	Y: Not applicable



Cooperative Work Experience:	N: Is not part of a cooperative work experience education program
Eligible for Credit by Exam:	NO
Eligible for Pass/No Pass:	NO
Taft College General Education:	NONE