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Date reviewed: January 24, 2019 C & GE approved: March 7, 2019 Board approved: April 10, 2019 Semester effective: Spring 2019

Energy Technology (ENER) 2900 Energy Technology Capstone (3 Units) CSU

Prerequisite: Completion or current enrollment in all other required courses in the Energy Technology program.

Advisory: Eligibility for English 1000, Reading 1005, and Mathematics 1050 is strongly recommended.

Hours and Unit Calculations:

48 hours lecture. 96 outside of class hours. (144 Total Student Learning Hours) 3 Units.

Catalog Description: This course is designed to be the culminating project specific to a program of study. Professional and employment related situations will be explored through a combination of simulations, case studies, scenarios, individual research papers, projects, portfolios and presentations necessary for twenty-first century success. Selection of a project will be based on need and/or interest related to the discipline. Not open to students with credit in MGMT 1560.

Type of Class/Course: Degree Credit

Text:

Robbins, Stephen P., and Timothy J. Judge. *Essentials of Organizational Behavior*, 14th ed., Pearson, 2017.

Course Objectives:

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

- 1. perform management assessment of energy-related scenarios and case studies,
- 2. apply business and legal reasoning to energy-related events, environmental situations, plant performance evaluations, and research,
- 3. synthesize theory and facts into action plans,
- 4. design and create possible effective management solutions to scenarios and cases,
- 5. propose and defend a solution,
- 6. integrate social knowledge with personal and interpersonal skills to effect change,
- 7. demonstrate the ability to research current energy and environmental issues and provide an analysis of theories and concepts involved in them, and
- 8. present a formal report and multi-media production detailing a problem, its dimensions, possible solutions, rationales for them, recommendation, rationales for it, and an evaluation plan for an energy-related operation or facility.

Course Scope and Content:

Unit I Project



- A. Research
- B. Study
- C. Design
- D. Development
- E. Presentation
- F. Formal 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 any of 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

Method of Instruction:

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

Methods of Evaluation:

- 1. Written assignments
- 2. Participation
 - a. Role-playing and group activities
 - b. Oral presentations and demonstrations
 - c. Discussion responses
 - d. Scenario reflections
- 3. Projects
 - a. Multimedia presentations
 - b. Business scenario responses
 - c. Formal written reports
 - d. Portfolio

| TOP Code: | 0946.10: Energy Systems Technology |
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| 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 |
| Discipline: | Interdisciplinary Studies |