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Industrial Technology (INTC) 1000 Career Readiness in Industrial Technology (3 Units)

Prerequisite: None

Total Hours: 48 hours lecture

Course Description: This course will cover survival skills necessary to be successful in careers in industrial technology fields. Emphasis will be placed on industrial safety, applied mathematics in the workplace, job survival and readiness skills, communication, quality control, planning and professional leadership. Field experiences to places of employment may be required.

Type of Class/Course: Degree Credit

Text: None

Additional Instructional Materials: None

Course Objectives:

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

1. understand specific safety requirements for their chosen occupation,
2. apply industrial mathematical functions used on the job,
3. develop communication skills necessary to obtain a job and function successfully on the job,
4. demonstrate good employment and job survival skills,
5. understand the various educational options and services available at Taft College, and the related requirements that apply,
6. understand the various opportunities in the industrial technology field, and
7. describe the educational requirements for the chosen occupation.

Course Scope and Content:

Unit I Industrial Safety

- A. General Safety and Health Provisions
- B. Occupational Health and Environmental Controls
- C. Personal Protective and Life-Saving Equipment
- D. Fire Protection and Prevention
- E. Signs, Signals and Barricades
- F. Tools: Hand and Power
- G. Hazardous Material Management
- H. Other Trade Specific Safety Requirements

Unit II Applied (Trade) Mathematics

- A. Review Whole Numbers, Fractions, Decimal Fractions, Ratios and Percents
- B. Measurements and Use of Industrial Precision Measurement Tools (linear, square and cubic measurements)
- C. Maintaining Accurate Records and Work Orders
- D. Calculating Wages, Deductions and Related Financial Management

Unit III Job Readiness and Survival Skills

- A. Preparing Resumes
- B. Completing Applications
- C. Practicing Pre-employment Tests
- D. Interview Techniques
- E. Job Responsibilities

Unit IV Communication and Quality Control

- A. Interpersonal Skills
- B. Job Responsibilities and Conflict Resolution
- C. Identifying Self Defeating Patterns
- D. Confidence and Personal Success
- E. Quality Control Concepts
- F. Work and Personal Pride

Unit V Planning and Professional Leadership

- A. Taft College Catalog, Semester Schedule and Related Online Services, and Available Student Services
- B. Goal Setting, Study Skills and Time Management
- C. Certificates, Associate of Arts and Sciences Degrees, and Transfer Programs
- D. Introduction to Career Exploration Systems and Exploration of Various Industrial Technology Areas and Related Careers
- E. Development of a Personal Educational Plan
- F. Professional Leadership within a Chosen Profession and Related Community Project
- G. Taking Pride in One's Work and Understanding Control Standards within the Profession

Learning Activities Required Outside of Class:

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

1. Completing the necessary assignments
2. Preparation for employment search
3. Conducting research for career options

Methods of Instruction:

1. Lectures
2. Presentations
3. Class discussions
4. Field experiences
5. Discussions and presentations by industry representatives and/or possible employers

Methods of Evaluation:

1. Computational or non-computational problem-solving demonstrations, including:
 - a. exams
 - b. quizzes
2. Skill demonstrations, including:
 - a. practical skill demonstration performance
 - b. presentations
 - c. individual and/or group projects
3. Other examinations, including:
 - a. multiple choice
 - b. true/false items