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

Prerequisite: None

Hours and Units Calculations:

48 hours lecture. 96 Outside-of-class hours (144 Total Student Learning hours) 3 Units

Course Description: This course will cover survival skills necessary to be successful in careers in industrial technology fields. Emphasis will be placed on applied mathematics in the workplace, work readiness skills, professional 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. apply industrial mathematical functions used on the job,
2. develop communication skills necessary to obtain a job and function successfully on the job,
3. demonstrate successful employment and job survival skills,
4. apply for appropriate certifications (Taft College and AWS)
5. understand the various opportunities in the industrial technology field, and
6. describe the educational requirements for the chosen occupation, and

Course Scope and Content:

Unit I 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. Layout (pipe fitting, structural layout, etc.)
- D. Calculating Wages, Deductions and Related Financial Management

- Unit II Work Readiness Skills
- A. Preparing Resumes
 - B. Completing Applications
 - C. Practicing Pre-employment Tests
 - D. Interview Techniques
 - E. Job Responsibilities

- Unit III Business Management Skills
- A. Interpersonal Skills
 - B. Conflict Resolution
 - C. Confidence and Personal Success
 - D. Quality Control Concepts
 - E. Work and Personal Pride
 - F. Maintaining Accurate Records and Work Orders

- Unit V Planning and Professional Leadership
- A. Meet with TC Counselor to identify appropriate certifications. Goal Setting, Study Skills and Time Management
 - B. Discuss Various Industrial Technology Areas and Related Careers
 - C. Professional Leadership within a Chosen Profession and Related Project

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 necessary assignments
2. Preparation for employment search
3. Conducting research on industrial related topics
4. Maintain a class journal
5. Studying class notes
6. Performing problem-solving activities or exercises
7. Doing written work
8. Participating in group projects

Methods of Instruction:

1. Lectures
2. Presentations
3. Class discussions
4. Field experiences
5. Discussions and presentations by industry representatives and/or possible employers
6. Videos
7. Demonstrations
8. Group explorations
9. Case studies

Methods of Evaluation:

1. Computational or non-computational problem-solving demonstrations, including:
 - a. Exams
 - b. Quizzes

2. Writing assignments, including:
 - a. group reports
 - b. case studies
 - c. scenarios
 - d. Simulations

3. Problem-solving demonstrations, including:
 - a. exams
 - b. homework problems
 - c. case study recommendations and solutions

4. Other examinations using combinations of:
 - a. multiple choice questions
 - b. matching items
 - c. true/false questions
 - d. short answer questions
 - e. fill in the blank responses

5. Participation including:
 - a. role-playing and group activities
 - b. oral presentations and demonstrations
 - c. discussion responses
 - d. scenario reflections

6. Project including:
 - a. multimedia presentations
 - b. business scenario responses
 - c. action plans
 - d. formal written reports
 - e. portfolios
 - f. community service projects
 - g. building new case studies

7. Skill demonstrations, including:
 - a. practical skill demonstration performance
 - b. presentations
 - c. individual and/or group projects

Supplemental Data:

TOP Code:	095600: Manufacturing and Industrial T
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SAM Priority Code:	C: Clearly Occupational
Distance Education:	Not Applicable
Funding Agency:	Y: Not Applicable(funds not used)
Program Status:	I: 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:	E: Credit By Exam
Eligible for Pass/No Pass:	NO
Taft College General Education:	NONE
Discipline:	Industrial Technologies or Welding