BARSTOW COMMUNITY COLLEGE COURSE OUTLINE – IMMT 60

Dept & Nbr: IMMT 60 **Abbrv Title:** Fundamentals of Industrial Maintenance.
Full Title: Fundamentals of Industrial Maintenance.
Old Number:

Title 5 Category: Associate Degree Applicable.
Certificate Applicable:

Units	Course Hrs per Week		Nbr of Weeks	Course Hrs Total	
Max: 1.0	Lecture	.75	18	Lecture	13.5
Min: 1.0	Lab	.25		Lab	13.5
	Contact DHR	0.0		Contact DHR	54.0
	Contact Total	1.0		Contact Total	18.0
	Non-contact DHR	0.0		Non-contact DHR	0.0

Delivery method: Lecture and Online.
Selected Topic: No
Grading: Option (A-F) (P/NP)
Concurrent Course: None.

Repeat Code: May be taken two times with a grade of less than "C".

Basic Skills 0: This is not a basic skills class.

CATALOG DESCRIPTION:
Designed to give the student the fundamental skills necessary to increase success in the workforce. Covered in this course are orientation to the trade, tools of the trade, fasteners and anchors, and introduction to test instruments.

PREREQUISITES: None.

COREQUISITES: None.

RECOMMENDED PREPARATION: None.

CONTENT:

A. Orientation to the trade.
   1. Type of work performed.
   2. Career opportunities.
   3. Responsibilities and characteristics of IMM workers.
   4. Safety.

B. Tools of the trade.
   1. Commonly used tools in the industry.
   2. Tool maintenance.
   3. Proper use.

C. Fasteners and anchors.
   1. Threaded fasteners and anchors.
   2. Non-threaded fasteners.
   3. Anchors.

D. Introduction to test equipment.
   1. Test Equipment.
   2. Test instruments scale.
   3. Frequency meter.

COURSE OBJECTIVES:

Upon success completion of this course the student will be able to:

1. Describe the types of work performed by industrial maintenance craft workers.
2. Identify career opportunities available to industrial maintenance craft workers.
3. Explain the purpose of each of the tools commonly used by industrial maintenance craft workers.
4. Describe how to maintain each of the tools used by industrial maintenance craft workers.
5. Demonstrate the proper basic maintenance of select industrial maintenance tools.
6. Identify and explain the use of threaded fasteners.
7. Identify and explain the use of non-threaded fasteners.
8. Identify and explain the use of anchors.
9. Explain the operation of and describe various pieces of test equipment.
10. Explain how to read and convert from one scale to another using the above test equipment.
11. Define frequency and explain the use of a frequency meter.

COURSE-LEVEL STUDENT LEARNING OUTCOMES:

1. **Demonstrate the proper use and basic maintenance of select industrial maintenance tools.**

Assessment Method(s): Performance Evaluation.

- Communication.
- Critical Thinking.
- Global Awareness.
- Personal/Professional Development.

2. **Identify and explain the use of various types of fasteners, commonly used in Industrial Maintenance Mechanics.**

Assessment Method(s): Performance Evaluation.

- Communication.
- Critical Thinking.
- Global Awareness.
- Personal/Professional Development.

3. **Demonstrate the use of various types of test equipment commonly used in Industrial Maintenance Mechanics.**

Assessment Method(s): Performance Evaluation.

- Communication.
- Critical Thinking.
- Global Awareness.
- Personal/Professional Development.

B. Critical Thinking Tasks/Assignments:

Critical thinking assignments include (but are not limited to) the following:

1. Identify options for tools used in industrial Maintenance Mechanics.
2. Solve problems related to various situations.

C. Measurement of Student Learning Outcomes:

1. Substantial writing assignments, including:
   - Written homework
   - The course primarily involves skill demonstrations or problem solving.
2. Computational or non-computational problem-solving demonstration, including:
   - Exam(s)
   - Quizzes
   - Homework problems
3. Skill demonstration, including:
   - Class performance(s)
4. Objective examinations, including:
   - Multiple choice
   - Completion
5. Other
   - Attendance/Participation
   - Observation

REQUIRED READING, WRITING AND OTHER OUTSIDE-OF-CLASS ASSIGNMENTS:

Over an 18-week presentation of the course three hours of study are required for each unit of credit. Two hours of independent work done out of class are required for each hour of lecture. Outside of the regular class time the students in this class will be doing the following:

- Study
- Answer questions
- Skill Practice
- Required reading
- Problem solving activity or exercise
- Written work

BASIS FOR GRADES:

Writing Assignments	20%
Problem-Solving	20%
Skill Demonstrations	20%
Objective Examinations	20%
Attendance & Participation	20%
Other…….	%
TOTAL	**100%**

TEXTS/MATERIALS

Contren, Industrial Maintenance Mechanic Level1, Prentice-Hall 2007

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==========**Instructional Office Use Only - Signatures and Codes**==========

Instructional Vice President Approval: Steven Eaton, AAVP