

BARSTOW COMMUNITY COLLEGE COURSE OUTLINE –**IMMT 62****Dept & Nbr:** IMMT 62**Abbrev Title:** Oxyfuel Cutting.**Full Title:** Oxyfuel Cutting.**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 0.0
	Contact Total 1.5		Contact Total 27.0
	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 skill necessary to use Oxyfuel cutting equipment safely.

PREREQUISITES: None.**COREQUISITES:** None.**RECOMMENDED PREPARATION:** None.**CONTENT:**

1. Oxyfuel cutting equipment use
2. Oxyfuel equipment safely.
3. Lighting and adjusting an Oxyfuel torch.
4. Shutting down Oxyfuel cutting equipment.
5. Disassembling Oxyfuel cutting equipment.
6. Changing empty cylinders.
7. Oxyfuel cutting.
8. Rosebud flames
9. Motorized, portable Oxyfuel gas cutting machine.

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

1. Identify and explain the use of Oxyfuel cutting equipment.
2. State the safety precautions for using Oxyfuel equipment.
3. Set up Oxyfuel cutting equipment.
4. Light and adjust an Oxyfuel torch.
5. Shut down Oxyfuel cutting equipment.
6. Disassemble Oxyfuel cutting equipment.

7. Change empty cylinders.
8. Perform Oxyfuel cutting.
 - Straight line and square shapes.
 - Piercing and slot cutting.
 - Bevels.
 - Washing.
9. Apply a rosebud flame to remove frozen components (also preheat and expanding larger fittings).
10. Operate a motorized, portable Oxyfuel gas cutting machine.

COURSE-LEVEL STUDENT LEARNING OUTCOMES:

1. Set up, light adjust, and shut down Oxyfuel equipment.

Assessment Method(s): Performance Evaluation.

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

2. Operate a track burner.

Assessment Method(s): Performance Evaluation.

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

3. Perform Oxy fuel cutting:

- Straight line and square shape.
- Piercing and slot cutting.
- Bevels.
- Washing.

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 Oxyfuel cutting..
2. Solve problems related to various topics related to Oxyfuel cutting.

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

Submitted by: Ken Graham/Nancy Nunes-Gill

Area Department: B & W

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

Instructional Vice President Approval: Steven Eaton, AAVP

Curriculum Committee Approval Date: 11May12

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