BARSTOW COMMUNITY COLLEGE COURSE OUTLINE -

IMMT 70

13.5

13.5

0.0

27.0

Dept & Nbr: IMMT 70 Full Title: Basic Layout Old Number: Abbrv Title: Basic Layout

Title 5 Category: Associate Degree Applicable Certificate Applicable:

Units **Course Hrs per Week** Nbr of Weeks **Course Hrs Total** Max: 1.0 Lecture Lecture .75 18 Min: 1.0 Lab .25 Lab Contact DHR 0.0 Contact DHR Contact Total Contact Total 1.5

Non-contact DHR 0.0

Delivery methods: Lecture and Online Selected Topic: No Grading: Option (A-F) (P/NP) Concurrent Course: None Non-contact DHR 0.0

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 do basic layout on the jobsite. Covered in this course are layout tools, basic layout including scribing, and using quantitative skill required in layouts.

PREREQUISITES: None

COREQUISITES: None

RECOMMENDED PREPARATION: None

CONTENT:

- A Layout tools
- **B** Layout methods
 - 1. Arc method
 - 2. 3-4-5 method
- C Scribing lines
- **D** Introduction to quantitative skills

COURSE OBJECTIVES:

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

- 1. Identify layout tools and explain their uses.
- 2. Lay out base lines using the arc method.
- 3. Lay out base lines using the 3-4-5 method
- 4. Scribe straight lines.
- 5. Scribe perpendicular lines to base lines using a square.
- 6. Scribe perpendicular lines to an edge using a combination square.
- 7. Lay out angled lines using a combination square and protractor.
- 8. Lay out circles using dividers and trammel points.

- 9. Lay out perpendicular lines from base lines using dividers and reference points.
- 10. Bisect lines using dividers.
- 11. Divide a line into equal parts.
- 12. Divide a circle into equal parts.
- 13. Lay out equipment locations.

COURSE-LEVEL STUDENT LEARNING OUTCOMES:

1. Lay out perpendicular lines from a reference line using:

- Arc Method
- 3-4-5 Method

Assessment method(s): Performance Evaluation

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

2. Scribe the following:

Straight lines.

Perpendicular lines to base lines using a square. Perpendicular lines to an edge using a combination square. Angled lines using a combination square. Angled lines using a protractor. Circles using dividers. Perpendicular lines from base lines using dividers. Perpendicular lines from base lines using reference points.

Assessment method(s): Performance Evaluation

- Communication
- Critical Thinking
- Global Awareness
- Personal/Professional Development
- **3.** Divide lines and circles into equal parts.

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 basic layouts used in Industrial Maintenance Mechanics.
- 2. Solve problems related to various situations.

Other outside class assignments include (but are not limited to) the following:

1. Research construction related techniques and procedures related to the electrical trades.

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

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%
Total	100%

TEXTS/MATERIALS

Contren, Industrial Maintenance Mechanic Level 1, Prentice-Hall 2007

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Instructional Vice President Approval: Steven Eaton, AAVP

Curriculum Committee Approval Date: 11May12

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