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<b>Course Prefix/No.:</b>	<b>IMT 114</b>
<b>Course Title:</b>	<b>Bench Work and Assembly</b>
<b>Lecture Hours/Week:</b>	<b>1.0</b>
<b>Lab Hours/Week:</b>	<b>3.0</b>
<b>Credit Hours/Semester:</b>	<b>2.0</b>

[Distance Learning Attendance/VA Statement](#)  
[Textbook Information](#)

## **COURSE DESCRIPTION**

This course covers the use of hand and power tools, measuring, and prints associated with an assembly project.

## **COURSE COMPETENCIES**

Upon successful completion of this course, the student should be able to perform the following tasks:

### **Module 1 – Measurement and Layout**

- Demonstrate the proper storage and maintenance of equipment.
- Demonstrate personal and shop safety at all times.
- Demonstrate the use of precision measuring devices.
- Demonstrate the use of shop drawings.
- Demonstrate the use of proper layout equipment and procedures.

### **Module 2 – Hand Tools**

- Demonstrate personal and shop safety at all times.
- Demonstrate the proper startup and shutdown procedures and pressure settings for OxyFuel cutting system.
- Demonstrate the proper use of various hand tools, such as hacksaws, hand files, screwdrivers, wrenches, sockets, and punches.
- Demonstrate the proper storage and maintenance of equipment.

### **Module 3 – Power Tools**

- Demonstrate personal and shop safety at all times.
- Demonstrate the proper use of various power tools, such as drill presses, hand drills, bench grinders, side grinders, circular saws, horizontal band saws.
- Demonstrate the proper storage and maintenance of equipment.

### **Module 4 - Fasteners**

- Demonstrate personal and shop safety at all times.
- Identify selected fasteners, their size, strength, and their use in industry.
- Demonstrate the use of thread taps, dies and drill bit selection.
- Demonstrate the proper storage and maintenance of equipment.

## **MINIMAL STANDARDS**

Assignments and attendance must be completed as designated in "Evaluation Strategies/Grading." Criteria for minimal acceptable performance will be provided by the instructor.

## **REQUIREMENTS**

### **Attendance Policy**

The college attendance policy, stated in the college handbook, will be honored. The instructor will provide specific requirements for the course.

### **Academic Honesty**

Students are expected to adhere to the college policy regarding student conduct as stated in the college handbook.

### **Assignments**

Students are expected to complete all assignments and any supplementary exercises designated by the instructor.

## **EVALUATION STRATEGIES/GRADING**

Successful completion of the course requires the completion of all modules with an average of 70 points. Grades will be calculated from work attitude, all tests/projects, homework assignments, and laboratory assignments.

### **Grading Scale:**

A = 90.0 – 100

B = 80.0 – 89.9

C = 70.0 – 79.9

D = 60.0 – 69.9

F = 00.0 – 59.9

### **Evaluation Method:**

Tests/Shop Projects

Module 1                      20% of final grade average

Module 2                      20% of final grade average

Module 3                      20% of final grade average

Module 4                      20% of final grade average

Work Attitude                      20% of final grade average

Work Attitude is defined as:

- Participation
- Cooperation
- Appearance
- Effort
- Safety
- Responsibility
- Professionalism
- Attendance
- Self Motivation
- Works Independently

## **METHODS OF INSTRUCTION**

Lectures, reading assignments, projects, discussions, video presentations, multi-media presentations, and web content are the major teaching methods used in this course.

**ENTRY LEVEL SKILLS**

The student must be able to read and solve basic mathematical equations.

**PREREQUISITES:** RDG 031 or equivalent; MAT 031 or equivalent

**CO-REQUISITES:** None

**Disabilities Statement:** Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Offices (SR) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.

Effective: 2009FA