# MARTIN COMMUNITY COLLEGE COURSE SYLLABUS

Semester/Year: Spring 2011

**COURSE NUMBER:** WLD 111(1) **INSTRUCTOR:** Ryal Watkins

**OFFICE NO:** NA

**COURSE TITLE:** Oxy-Fuel Welding

**OFFICE/VIRTUAL HOURS: NA** 

**CREDIT HOURS:** 2

PHONE NO: NA

**CONTACT HRS/WK:** 4 (1 class, 3 lab)

**FAX:** (252)792-0826

**PREREQUISITES:** None

**E-MAIL:** rwatkins@mcc.martincc.edu

**COREQUISITES:** None

**COURSE DESCRIPTION:** This course introduces the oxy-fuel welding process. Topics include safety, proper equipment setup, and operation of oxy-fuel welding equipment with emphasis on bead application, profile, and discontinuities. Upon completion, students should be able to oxy-fuel weld fillets and grooves on plate and pipe in various positions.

### PROGRAM LEARNING OUTCOMES:

- 1. Utilize tools and equipment to service and maintain mechanical systems, plumbing systems, Hydraulic and pneumatic systems and electrical and electronic systems.
- 2. Create, interpret, and modify industrial blueprints and schematics.
- 3. Perform preventive maintenance and troubleshoot a variety of industrial systems.
- 4. Perform various welding and cutting processes used in current industry.

#### **COURSE LEARNING OUTCOMES:**

- 1. Explain the oxy-fuel welding process.
- 2. Oxy-weld fillets and groves on plates and pipe in various positions.
- 3. Demonstrate correct safety practices while welding.

**SUPPLEMENTAL TEXTBOOKS:** Victor Welding, Cutting, and Heating Guides Manual # 0056-0114

**SUPPLEMENTAL RESOURCES:** Student will receive handouts as supplemental information. One three-ring binder is recommended. Safety shoes, work gloves, safety glasses, and coveralls are required.

**LEARNING/TEACHING METHODS**: Hands-on welding, lecture, projects, outside reading assignments

## ASSESMENTS/METHODS OF EVALUATION:

| Test                       | 50% |
|----------------------------|-----|
| Attendance                 | 20% |
| Participation              | 15% |
| Outside Reading Assignment | 5%  |
| Final Exam                 | 10% |

For the Outside Reading Assignment students will write 2 one page papers on one of the following articles from an online or another reference:

Bio-Welding, Robotic Welding, Computerized Cutting, or Plastic Welding

#### **GRADE POLICY:**

| 90 - 100 | Α |
|----------|---|
| 80 - 89  | В |
| 70 - 79  | C |
| 60 - 69  | D |
| 0 - 59   | F |

#### **COURSE OUTLINE:**

| Week 1       | Safety & Setup of Oxygen / Acetylene torch and other types of oxy-fuel equipment. |
|--------------|---|
| Week 2       | Cutting Process   |
| Week 3 – 5   | Oxy. – Acet. (Flat Position)  |
| Week 6 – 8   | Oxy Acet. (Horizontal Position)   |
| Week 9 – 11  | Oxy. – Acet. (Vertical Position)  |
| Week 12 – 14 | Oxy. – Acet. (Overhead Position)  |
| Week 15      | Oxy. – Acet. (Pipe)   |
| Week 16      | Final Exam  |

**STUDENT ATTENDANCE POLICY:** Class attendance is considered a necessary part of the education experience and is required in curriculum courses. For this reason, each student will be expected to be present and on time for every class and lab meeting. The maximum number of hours students are permitted to miss has been established at 20 percent of the total contact hours of a curriculum course. Three tardies equal one hour of absence. For this course, six hours is the maximum number of hours a student can miss and still receive a passing grade.

# REQUEST FOR EXCUSED ABSENCES FOR RELIGIOUS OBSERVANCES\*

\*In compliance with G.S. 115D-5, MCC policy permits a student to be excused, with the opportunity to make-up any test or other missed work, a minimum of two excused absences per academic year for religious observances required by the student's faith. The policy limits the excused absences to a maximum of two days per academic year.

Students who wish to be excused for a Religious Observance required by their faith must complete and submit a request form to the instructor(s) <u>prior to the census date of each class.</u> The *Request for Excused Absences for Religious Observances* form can be picked up from Student Services. This does not supersede the college-wide attendance policy as outlined in the college catalog or syllabus, with the exception of a reasonable accommodation for the make-up of missed course work.

#### **COURSE POLICIES:**

- Three tardy count for one absence; a tardy is after the role has been called.
- Safety is the first priority during this class, if the instructor is not comfortable with an action of a student / students or a certain situation; the instructor has the authority to take action to make the situation safer.
- Make-up Policy: The lowest test grade will be dropped "NO TEST WILL BE MADE UP"
- Dress Code: Shirts must be worn at all times. No sandals or flip flops are allowed.
- (NO EXCEPTIONS)

- Cell phone and scanners will be turned OFF during class/lab hours unless permission granted by instructor.
- No tobacco products will be used during class period. Including Class and Project sections

If you cannot reach your instructor, you may contact Dr. Phyllis Broughton at (252) 789-0246 or (252) 789-0247 by phone, <u>pbroughton@martincc.edu</u> by e-mail, or in person at her office in Building 2, Room 3.

To access the Martin Community College Career Catalog for policies and curriculum requirements, please go online to www.martincc.edu.

If you have a need for a disability-related accommodation, please notify the Student Services counselor at (252) 792-0293.