

MARTIN COMMUNITY COLLEGE
COURSE SYLLABUS
Semester/Year: Spring 2011

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|------------------------|-------------------------|------------------------------|---------------------------|
| COURSE NUMBER: | WLD 112 (1E) | INSTRUCTOR: | Ryal Watkins |
| COURSE TITLE: | Basic Welding Processes | OFFICE NO: | Building 1, Room 28 |
| CREDIT HOURS: | 2 | OFFICE/VIRTUAL HOURS: | n/a |
| CONTACT HRS/WK: | 4 (1 class, 3 lab) | PHONE NO: | (252) 789-0278 |
| PREREQUISITES: | None | FAX: | 252-792-0826 |
| COREQUISITES: | None | E-MAIL: | rwatkins@mcc.martincc.edu |

COURSE DESCRIPTION: This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.

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 steps to setup a Oxy-Fuel equipment
2. Identify basic gases, mild steel fillers, and equipment
3. Safety perform basic welding processes

SUPPLEMENTAL TEXTBOOKS: Arc Welding (Eighth Edition), John R. Walker/W. Richard Polanin. The Goodheart-Willcox Company, Inc 2010.

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 assignment

ASSESMENTS/METHODS OF EVALUATION:

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|----------------------------|-----|
| 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:

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|----------|---|
| 90 - 100 | A |
| 80 - 89 | B |
| 70 - 79 | C |
| 60 - 69 | D |
| 0 - 59 | F |

COURSE OUTLINE: (Blocked Course)

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|------------|-----------------------------------|
| Week 1 | Safety and Cutting Process |
| Week 2 - 3 | Shielded Metal Arc Welding (SMAW) |
| Week 4 - 5 | Gas Tungsten Arc Welding (GTAW) |
| Week 6 - 7 | Gas Metal Arc Welding (GMAW) |
| Week 8 | 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) prior to the census date of each class. 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, pbroughton@martincc.edu 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.