

MARTIN COMMUNITY COLLEGE
COURSE SYLLABUS
Semester/Year: Spring 2011

COURSE NUMBER: WLD 110 (1E)	INSTRUCTOR: William Whitfield
COURSE TITLE: Cutting Processes	OFFICE NO: NA
CREDIT HOURS: 2	OFFICE/VIRTUAL HOURS: NA
CONTACT HRS/WK: 4 (1 class, 3 lab)	PHONE NO: (252)789-0246 ~ Dr. Broughton
PREREQUISITES: None	FAX: (252)792-0826
COREQUISITES: None	E-MAIL: wwhitfield@mcc.martincc.edu

COURSE DESCRIPTION:

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.

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. Discuss oxy-fuel and plasma-arc cutting systems
2. Perform Oxy-fuel and plasma-arc metal cuts of varying thicknesses.
3. Demonstrate correct safety practices while cutting.

Other outcomes:

1. Identify the various components of an oxy-fuel gas cutting outfit.
2. Cite the maximum safe working pressure used for acetylene gas.
3. Describe the equipment used to semi-automate or fully automate the cutting process.
4. Correctly and safely assemble an oxy-fuel gas cutting outfit.
5. Distinguish between a well cut surface and poorly cut surface, and be able to adjust where necessary to perform a good cut.

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

ASSESSMENTS/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	A
80 - 89	B
70 - 79	C
60 - 69	D
0 - 59	F

COURSE OUTLINE:

Week 1	Safety & Setup of Oxygen / Acetylene torch
Week 2-3	Cutting (Straight Lines)
Week 4-5	Cutting (Circles)
Week 6	Cutting (Squares)
Week 7	Cutting with track torch
Week 8	Plasma Cutting
Week 7	Arc Gouging
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.

RELIGIOUS OBSERVANCE:

***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 maximum 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.