MIDLAND COLLEGE
SYLLABUS
WLDG 2451
ADVANCED GAS TUNGSTEN ARC WELDING
2-4

Course Description:

Advanced topics in GTAW welding, including welding in various positions and directions. The student will exhibit expertise in various welding positions on pipe; describe safety rules and equipment used; and describe the effects of welding parameters in GTAW. The student will weld various joint designs and diagnose welding problems and perform visual inspection. Prerequisite: WLDG 1434

Text, References, and Supplies:

1. **MODERN WELDING**, Althouse, Turnquist & Bowditch.
2. Handouts from American Welding Society, Victor & Lincoln.

The student will need to provide his/her own:
Welding hood with correct lens
Welding gloves
Welding/cutting goggles with #5 lens
Tape measure
Appropriate clothing for welding
Safety Glasses

Course Goal/Objectives:

The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. Upon successful completion of the course the student will; (*designates a CRUCIAL Goal)

1. Define Welding Terms
2. Complete Chapter 16 Study Guide and Test
3. Complete Chapter 21 Study Guide and Test
4. Complete Chapter 22 Study Guide and Test
5. GTAW 2" Pipe Steel 1G (Test)
6. GTAW 2" Pipe Aluminum 1G (Test)
7. GTAW 4" Pipe Steel 2G
8. GTAW 4" Pipe Steel 5G

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9. GTAW 4" Pipe Steel 6G (Test)
10. GTAW 3" Pipe Aluminum 6G (Test)
11. GTAW 6" Pipe Stainless 6G
12. GTAW 3" Pipe Stainless 6G
13. GTAW 2" Pipe Stainless 6G

Student Contributions, and Class Policies:

Attendance, desire to learn with steady and consistent work.

1.The student will be enrolled in WELD 2451. The student will exhibit professional behavior. Performance will be satisfactory if;

A. College attendance is adhered to
B. Student participates in class
C. Student maintains a positive attitude

2. Unless otherwise stated, the student will be allowed references, including research material located in the Midland College Welding Technology Library. The student will be provided demonstrations for each of the content goals as seen necessary by the instructor. These goals will be complete and satisfactory is consistent with AWS and the course text.

3. Student will use department computers to access AWS software and research procedures and required results of welding codes.

4. Satisfactory performance will be measured by an objective and/or application exam and instructor's observation.

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Evaluation of Students:

Weld Grades.....50%
Chapter Tests.....10%
Attendance, Class Participation,
And Attitude.....10%
Notebook.....10%
Final Examination.....20%

90 and above	A
80 to 89	B
70 to 79	C
60 to 69	D
50 to 59	F

(1 point per absence)

Course Schedule:

This class meets for 2 lecture hours and 5 lab hours per week.

SCANS Information:

The following SCANS skills are taught and reinforced in this course:

RESOURCES:
Selects material and equipment and procedure which will allow or produce enough time to complete all goals. Estimates cost to complete all content goals.

THINKING:
Specifies goals and procedures needed to meet the desired test results. Develops new learning technique in researching AWS codes. Learns that strict compliance to the rules and regulations of these codes are necessary.

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Program Information:

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Curt Pervier, Applied Technology Dean
Lisa Hays, Applied Technology Secretary
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Students are encouraged to contact the instructor at any time; however, making an appointment will guarantee the instructor's availability at a specific time.

Americans with Disabilities Act (ADA) Statement:

Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must visit www.midland.edu/accommodation and complete the Application for Accommodation Services located under the Apply for Accommodations tab. Services or accommodations are not automatic, each student must apply and be approved to receive them. All documentation submitted will be reviewed and a "Notice of Accommodations" letter will be sent to instructors outlining any reasonable accommodations.

Students MUST actively participate by completing an academic assignment required by the instructor by the official census date. Students who do not actively participate in an academically-related activity will be reported as never attended and dropped from the course.

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies: **Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu.** For further information on notice of non-discrimination, visit **http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm** or call **1 (800) 421-3481**.

Spanish

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