

**MIDLAND COLLEGE**  
**SYLLABUS**  
**WLDG 1434**  
**INTRODUCTION TO GAS TUNGSTEN ARC WELDING**  
**2-5**

**Course Description:** Principles of gas tungsten arc welding (GTAW), including set-up and GTAW equipment. Instruction in various positions and joint designs. Prerequisites: WLDG 1421.

**Text, References, and Supplies:**

1. **MODERN WELDING**, Althouse, Turnquist & Bowditch.
2. Handouts from American Welding Society, Victor, and 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 and footwear for welding  
Safety glasses

**Course Goal/Objectives:** The following list of course goals will be addressed. These goals are directly related to the performance objectives. Upon successful completion of the course the student will;

1. Define Welding Terms
2. Complete Chapter 13 Study Guide and Test
3. Complete Chapter 14 Study Guide and Test
4. Assemble and Disassemble GTAW Outfit
5. GTAW Bead Plates, Steel 1F, 2F, 3F, & 4F
6. GTAW Lap Joint, Steel 2F
7. GTAW Lap Joint, Steel 3F
8. GTAW Lap Joint, Steel 4F
9. GTAW Tee Joint, Steel 2F
10. GTAW Tee Joint, Steel 3F

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11. GTAW Tee Joint, Steel 4F
12. GTAW Bead Plates Aluminum 1F, 2F, 3F, & 4F
13. GTAW Lap Joint Aluminum 2F
14. GTAW Lap Joint Aluminum 3F
15. GTAW Lap Joint Aluminum 4F
16. GTAW Tee Joint Aluminum 2F
17. GTAW Tee Joint Aluminum 3F
18. GTAW Tee Joint Aluminum 4F
19. GTAW Butt Joint Steel 2F-Test
20. GTAW Butt Joint Aluminum 2F-Test
21. GTAW Butt Joint Steel 3F-Test
22. GTAW Butt Joint Aluminum 3F-Test
23. GTAW Butt Joint Steel 4F-Test
24. GTAW Butt Joint Aluminum 4F-Test
25. GTAW 2" Pipe Steel 1G
26. GTAW 2" Pipe Aluminum 1G

**Student Contributions, and  
Class Policies:**

Attendance, desire to learn with steady and consistent work.

1. The student will be enrolled in WELD 1434. The student will exhibit professional behavior. Student's performance will be satisfactory if;

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

2. Unless otherwise stated, the student will be allowed reference materials including various welding texts, periodicals, and online resources. The student will be provided demonstrations for each of the content goals deemed necessary by the instructor. These goals will be complete and satisfactory is consistent with AWS and the course text.

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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 objective and/or application exams and instructor's observations.

**Evaluation of Students:**

WeldGrades.....	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 (approximately) 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 techniques in researching AWS codes. Learns that strict compliance to the rules and regulations of these codes are necessary.

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**Instructor Information:**

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Office Hours: TBA by Individual Instructors

Curt Pervier, Applied Technology Dean  
Lisa Hays, Applied Technology Secretary  
Room 143A TC (Main Campus)  
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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](http://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](mailto:tbaker@midland.edu)**; **Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, [nmorgan@midland.edu](mailto: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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