

MIDLAND COLLEGE
SYLLABUS
WLDG 1430
INTRODUCTION TO METAL ARC WELDING
2-5

Course Description:

Principles of gas metal arc welding, setup and use of Gas Metal Arc Welding (GMAW) equipment, and safe use of tools/equipment, and safe use of tools/equipment. Instruction in various joint designs. Co-requisites: WLDG 1421.

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
Face shields - tinted
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;

1. Complete Chapter 13 Study Guide & Test
2. Complete Chapter 15 Study Guide & Test
3. Complete Chapter 19 Study Guide & Test
4. Complete Chapter 33 Study Guide & Test
5. Define Welding Terms
6. GMAW, .035 Wire, Fillet 2F
7. GMAW, .035 Wire, Fillet 3FD
8. GMAW, .035 Wire, Fillet 4F

MIDLAND COLLEGE
SYLLABUS
WLDG 1430
INTRODUCTION TO METAL ARC WELDING
2-5

9. GMAW, .035 Wire, Lap 2F
10. GMAW, .035 Wire, Lap 3FD
11. GMAW, .035 Wire, Lap 4F
12. GMAW, .035 Wire, Pipe to Plate 2F
13. GMAW, .035 Wire, Pipe to Plate 5FD
14. GMAW, .035 Wire, Pipe to Plate 5FU
15. GMAW, .035 Wire, Pipe to Plate Overhead 4F
16. GMAW, Flux Cored, Fillet 2F
17. GMAW, Flux Cored, Fillet 3FD
18. GMAW, Flux Cored, Lap 2F
19. GMAW, .035 Wire, V-Groove Butt 1G
20. GMAW, .035 Wire, V-Groove Butt 3GD
21. GMAW, .035 Wire, V-Groove Butt 3GU
22. GMAW, .035 Wire, V-Groove Butt 2G
23. GMAW, .035 Wire, 6" Pipe 1G
24. GMAW, .035 Wire, 6" Pipe 5G
25. GMAW, .035 Wire, 6" Pipe 2G
26. GMAW, .035 Wire, 6" Pipe 6G

**Student Contributions, and
Class Policies:**

Attendance, desire to learn with steady and consistent work.

1. The student will be enrolled in WELD 1430. 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.

MIDLAND COLLEGE
SYLLABUS
WLDG 1430
INTRODUCTION TO METAL ARC WELDING
2-5

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 instructors' observation.

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.

TECHNOLOGY:

Understands the convolution involved with the use of GMAW power supplies, wire feeders and welder controlled electrode stick-out.

MIDLAND COLLEGE
SYLLABUS
WLDG 1430
INTRODUCTION TO GAS METAL ARC WELDING
2-5

Instructor Information:

Scott Cranford, Instructor ATC
E-Mail: scranford@midland.edu
ATC: (432) 681-6320
Fax: (432) 697-9887

Dan Ledbetter, Instructor
E-Mail: dledbetter@midland.edu
Tel: (432) 685-4681
Room 182 TC
Fax: (432) 685-6472

Ken Roland, Lab Instructor ATC
E-Mail: kroland@midland.edu
ATC: (432) 681-6347
Fax: (432) 697-9887

Office Hours: TBA by Individual Instructors

Curt Pervier, Applied Technology Dean
Lisa Hays, Applied Technology Secretary
Room 143A TC
Tel: (432) 685 4676
Fax: (432) 685-6472

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://wdcrobcop01.ed.gov/CFAPPS/OCR/contactus.cfm> or call 1 (800) 421-3481.

Spanish

Midland College no discrimina por motivos de raza, color, nacionalidad, sexo, discapacidad, o edad en sus programas o actividades. Las siguientes personas han sido designadas para responder a cualquier pregunta o duda sobre estas políticas no discriminatorias: **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**. Para más información sobre estas políticas no discriminatorias, visite <http://wdcrobcop01.ed.gov/CFAPPS/OCR/contactus.cfm> o llame al 1 (800) 421-3481.