

**MIDLAND COLLEGE**  
**SYLLABUS**  
**WLDG 1417**  
**LAYOUT AND FABRICATION**  
**2-5**

**Course Description:**

A fundamental course in layout and fabrication related to the welding industry. Major emphasis is on structural shapes and use in construction. The student will identify welding symbols; identify and select measuring instruments and tools for fabricating projects; recognize correct layout and fabrication terminology; and identify structural shapes and materials. The student will be responsible for choosing the proper procedures, tools, and equipment to perform assigned actions and be able to explain these actions. Lab fee required.

**Text, References, and Supplies:**

1. Blueprint Rendering for Welders Bennett & Siy
2. The student will need to provide his/her own Drafting equipment.

**Course Goal/Objectives:**

The following list of course goals will be addressed in the course. The goals are directly related to the performance objectives.

1. Define Terms
2. Demonstrate Blueprint Reading
3. Demonstrate Material Calculation
4. Complete Tool ID and Study Guide
5. Complete Job Spec. Study Guide
6. Complete Weld Symbol Study Guide and Test
7. Complete Fitting and Material Study Guide
8. Complete Weldment Design Study Guide and Test
9. Complete Orthographic Drawings
10. Complete Isometric Drawings

**MIDLAND COLLEGE  
SYLLABUS  
WLDG 1417  
LAYOUT AND FABRICATION  
2-5**

**Student Contributions, and  
Class Policies:**

Attendance, desire to learn with steady and  
Consistent work.

1. The student will be enrolled in WELD 1453. 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. Satisfactory performance will be measured by an  
objective and/or application exam and instructors  
observation.

**Evaluation of Students:**

Packet Grades.....50%  
Exercise 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)

**MIDLAND COLLEGE  
SYLLABUS  
WLDG 1417  
LAYOUT AND FABRICATION  
2-5**

**Course Schedule:**

This course 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.

**MIDLAND COLLEGE  
SYLLABUS  
WLDG 1417  
LAYOUT AND FABRICATION  
2-5**

**Instructor Information:**

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

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

Ken Roland, Lab Instructor ATC  
E-Mail: [kroland@midland.edu](mailto: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  
(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](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://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](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)**. Para más información sobre estas políticas no discriminatorias, visite <http://wdcrobcop01.ed.gov/CFAPPS/OCR/contactus.cfm> o llame al 1 (800) 421-3481.