

**WLDG 1202**  
**Fundamentals of Gas Metal Arc Welding**  
**(GMAW)**  
**Western Texas College**

- I. Basic Course Information
  - A. Course Description: Fundamentals of Gas Metal Arc Welding (GMAW). Includes setup and safe use of GMAW equipment as well as instruction in various basic weld joints.
  - B. Any required prerequisites: None, Introductory
  
- II. Student Learning Outcomes
  - A. Describe welding positions of basic weld joints.
  - B. Describe safety rules, equipment use, and basic visual inspection.
  - C. Demonstrate proper welding of basic joints in the flat position.
  
- III. Testing Requirements
  - A. The final exam will take place in the welding classroom.
  - B. Students are NOT allowed to use their notes of any kind while taking their tests and exams.
  
- IV. Major Course Requirements
  - A. Participation – 75%
  - B. Projects\Tests – 25%
  
- V. Information on Books and Other Course Materials
  - A. Required Book: no book required. Book ISBN: NA
  - B. Required Access Code: None
  
- VI. Other Policies, Procedures and important dates. Please refer to the WTC [Catalog](#) for the following:
  - A. Campus Calendar
  - B. Final exam schedule
  - C. How to drop a class
  - D. Withdrawal information
  - E. Student Conduct/Academic Integrity
  - F. Class Attendance
  - G. Students with disabilities

## VII. Course Content

<b>Week</b>	<b>Topic</b>
Week 1	Review Syllabus, Class Introduction, requirements, safety
Week 2-4	Introduction to GMAW <ul style="list-style-type: none"> <li>• How GMAW operates</li> <li>• Machinery setup</li> <li>• GMAW uses</li> <li>• Electrode types &amp; uses</li> <li>• Review &amp; Test</li> </ul>
Week 5-7	GMAW Machine Use <ul style="list-style-type: none"> <li>• Parts identification &amp; purpose</li> <li>• Assembly of parts</li> <li>• Proper adjustment of machine</li> <li>• Review &amp; Test</li> </ul>
Week 8-10	Shielding Gasses & Electrodes used in GMAW <ul style="list-style-type: none"> <li>• Types of Gasses</li> <li>• Uses</li> <li>• Electrodes used</li> <li>• Review &amp; Test</li> </ul>
Week 11-14	Weld Joints and Proper Positioning of Weld Gun for each in all positions <ul style="list-style-type: none"> <li>• Butt joints</li> <li>• T joint</li> <li>• Lap joint</li> <li>• Corner joint</li> <li>• Edge joint</li> <li>• Review &amp; Test</li> </ul>
Week 15	Course Review
Week 16	<b>Final Exam</b>

Disclaimer: Sequence & Content is subject to change at the instructor's discretion

