

WLDG 1206
Fundamentals of Gas Tungsten Arc
Welding (GTAW)
Western Texas College

- I. Basic Course Information
 - A. Course Description: Includes setup and safe use of GTAW equipment as well as instruction in flat positions on joint designs.
 - B. Any required prerequisites: None, Introductory

- II. Student Learning Outcomes
 - A. Describe various joint designs
 - B. Describe safety rules and equipment
 - C. Perform basic visual inspection of equipment
 - D. Demonstrate proper welding techniques of ferrous or non-ferrous metal 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

Week	Topic
Week 1	Review Syllabus, Class Introduction, requirements, safety
Week 2-4	Introduction to GTAW <ol style="list-style-type: none"> 1. How GTAW operates 2. Machinery setup 3. GTAW uses 4. Technical Terms 5. Review & Test
Week 5-7	GTAW Machine Use <ol style="list-style-type: none"> 1. Parts identification & purpose 2. Assembly of parts 3. Proper adjustment of machine 4. Review & Test
Week 8-10	Shielding Gasses & Electrodes used in GTAW <ol style="list-style-type: none"> 1. Types of Gasses 2. Uses 3. Remote current control 4. Review & Test
Week 11-14	Weld joints and proper Positioning of TIG Torch <ol style="list-style-type: none"> 1. Butt joints 2. T joints 3. Lap joints 4. Corner joints 5. Edge joints 6. Review & Test
Week 15	Course Review
Week 16	Final Exam

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