Intermediate SMAW   (WLDG 1457 2B1 & 5B1)

INSTRUCTOR CONTACT INFORMATION

Instructor: Sean Fillyaw

Email: sdfillyaw@lit.edu

Office Phone: 409-247-5004

Office Location: Tommy Williams – ITC1 - 104

Office Hours: Monday, Wednesday 4:00 P.M. – 5:00 P.M.

CREDIT
4 Semester Credit Hours (2 hours lecture, 6 hours lab)

MODE OF INSTRUCTION
Hybrid

PREREQUISITE/CO-REQUISITE:
Intro Shielded Metal Arc Welding

COURSE DESCRIPTION
A study of the production of various fillet and groove welds. Preparation of specimens for testing in various positions.

COURSE OBJECTIVES
Upon completion of this course, the student will be able to

1.   Select electrodes and amperage setting for various thicknesses of metal and welding positions.

2.   Identify principles of arc welding; describe arc welding operations of fillet and groove joints; explain heat treatments of low alloy steels; explain weld size and profiles; prepare test plates; perform fillet welds in the overhead position; perform air carbon arc weld removal; perform groove welds in various positions; and demonstrate use of tools and equipment.

3.   Perform SMAW operations in various positions using selected electrodes and different joint designs.

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REQUIRED TEXTBOOK AND MATERIALS

1. *Modern Welding.* Althouse, Turnquist, Bowditch.

    a. Latest Edition

2. **Personal Tool List** (approximately $150-$250).
   1. Hood
   2. Welder's cap
   3. Shade 10 or 11 lens
   4. Clear lens (10)
   5. Long sleeve 100% cotton shirt or leather sleeves or leather jacket
   6. Long 100% cotton work pants (jeans)
   7. High top leather boots (steel toe)
   8. Leather gloves
   9. Chipping hammer
   10. Wire brush
   11. Safety glasses
   12. Cutting goggles or glasses (shade 5)
   13. Measuring tape
   14. Tip cleaner
   15. 12" combination square
   16. Pliers
   17. Flashlight
   18. 4 1/2" or 5" grinder
   Students will not be allowed in class without the proper equipment and clothing

ATTENDANCE POLICY

- Students are allowed to miss two days without penalty; each additional day will result in the student's grade being dropped by a letter grade.

    Example: 1 days absent = If student has an A average no penalty

                   2 days absent = A drops to a B

                   3 days absent = B drops to a C

                   4 days absent = C drops to a D (student must retake class)

                   5 days absent = D drops to a F (student must retake class)

I.   Absences are counted for unexcused, excused and coming to class late.

II.   2 tardies = 1 absence

    A.   Tardy- arriving within 15 minutes after class begins or leaving before the end of class.

B.   More than 15 minutes late you will be counted absent.

C.   If you go to sleep in class you will be counted absent.

III.   **Excused absences.** Only given to allow students to make up missed work.

A.   Will be given for documented Injury or Illness. Doctor's excuse required showing proof. Will count toward total days missed.

B.   Will be given for documented Death in immediate family. Will count toward total days missed.

C.   Approved LIT school functions; E.g. SkillsUSA, SGA etc. Will not count toward total days missed

D.   It is the student's responsibility to obtain from the instructor any handouts or assignments for classes missed. Lectures will not be repeated.

IV.   If you wish to drop, you are responsible for the drop process. I will not initiate the drop, no matter how many absences or zeroes you have; that is, if you stop coming to class and do not drop, you will earn an "F" in the course. Students are only allowed to drop 6 times in their college career.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the [Academic Calendar](#). If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

COURSE CALENDAR

Week	Topic	Reference
8/26/2024	Course introduction and policies	Syllabi
9/06/2024	Shop orientation and safety procedures	
9/13/2024	Cutting torch safety and procedures	Instructor
9/20/2024	Measuring and Lay-out tools	Demonstration/
	Use the Oxyfuel torch to cut metal	Supervision
	Welding Flat V-Groove welds with 6010 & 7018	
	Visual test of weld beads	
	• LECTURE/LAB	

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Week	Topic	Reference
9/27/2024 10/04/2024 10/11/2024	Use the Oxyfuel torch to cut metal Welding Horizontal Groove Welds with 6010 & 7018 Electrodes Visual test of weld beads • LECTURE/LAB	Instructor Demonstration/ Supervision
10/18/2024 11/01/2024 11/08/2024 11/15/2024	Use the Oxyfuel torch to cut metal Welding Vertical Groove Welds with 6010 & 7018 Electrodes Visual test of weld beads • LECTURE/LAB	Instructor Demonstration/ Supervision
11/22/2024 11/29/2024 12/06/2024	Use the Oxyfuel torch to cut metal Welding Overhead Groove Welds with 6010 & 7018 Electrodes Visual test of weld beads • LECTURE/LAB	Instructor Demonstration/ Supervision

Dates are subject to change

COURSE EVALUATION
Final grades will be calculated according to the following criteria:
- Assignments   30%
- TEST   70%

GRADING SCALE
90-100   A
80-89   B
70-79   C
60-69   D
0-59   F

LIT does not use +/- grading scales

ACADEMIC DISHONESTY
Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty.

TECHNICAL REQUIREMENTS
The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. A functional broadband internet connection, such as DSL, cable, or Wi-Fi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

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The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at Special Populations - Lamar Institute of Technology (lit.edu).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

AI STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI / ChatGPT in their courses.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

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Classroom Policies

1. No electronic devices of any kind (cell phones, I-pod, headphone, etc.) will be tolerated in the classrooms or labs. If you are seen using any electronic device you will be asked to leave the class for the day.

2. No food or drink will be allowed in the classroom.

3. No derogatory or foul language will be tolerated.

4. We have a zero-tolerance policy for sexual harassment.

5. We have a zero-tolerance policy of racial or ethnic discrimination.

6. Be considerate of others in the classroom. Remember they paid for the class just like you.

Late Penalties will be assessed on all work turned in late. 5 points per day.

Average a grade on all test and assignments of at least 70%.

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