



**WELD 1090 Gas Metal Arc Welding
COURSE SYLLABUS
Fall Semester 2023 (202412)**

COURSE INFORMATION

Credit Hours/Minutes: 4/4500
Class Location: Room 416
Class Meets: M, W 6:10-8:40 p.m.
CRN: 20073

INSTRUCTOR CONTACT INFORMATION

Instructor Name: Mr. Michael Crumpler
Email Address: [Michael Crumpler mcrumpler@southeasterntech.edu](mailto:Michael.Crumpler@mcrumpler@southeasterntech.edu)
Vidalia Campus/Office Location: Room 417
Office Hours: Tuesday and Thursday 10:00 – 2:30 p.m.
Phone: 912-538-3257
Fax Number: 912-538-3156
Tutoring Hours (if applicable): See instructor to schedule an appointment

SOUTHEASTERN TECHNICAL COLLEGE'S (STC) CATALOG AND HANDBOOK

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's [Catalog and Handbook \(https://catalog.southeasterntech.edu/\)](https://catalog.southeasterntech.edu/).

REQUIRED TEXT

None

REQUIRED SUPPLIES & SOFTWARE

Long sleeve shirt or welding jacket, welding helmet, clear safety glasses, welding gloves, ear plugs, wire brush, wire cutters, Vice grips, 12" Crescent Wrench, 12' tape measure and a 4 ½" angle grinder. You will not be permitted to borrow from the Instructor or your fellow classmates.

Students should not share login credentials with others and should change passwords periodically to maintain security.

COURSE DESCRIPTION

WELD 1090 – Gas Metal Arc Welding provides knowledge of theory, safety practices, equipment and techniques required for successful Gas Metal Arc Welding. Qualification tests, all positions, are used in the evaluation of student progress toward making industrial standard welds. Topics include: Gas Metal Arc Welding Safety and Health Practices; Gas Metal Arc Welding Theory; Machines, and Set Up: Transfer Modes; Wire Selection; Shielded Gas Selection; and Gas Metal Arc Welding Joints

MAJOR COURSE COMPETENCIES

1. Gas Metal Arc Welding Safety and Health Practices
2. Gas Metal Arc Welding Theory, Machines and Set Up
3. Transfer Modes
4. Wire Selection
5. Shielded Gas Selection
6. Gas Metal Arc Welding Joints in All Positions

PREREQUISITE(S)

All Required, WELD 1000 Introduction to Welding Technology

COURSE OUTLINE

Gas Metal Arc Welding Safety and Health Practices; Gas Metal Arc Welding Theory; Machines, and Set Up; Transfer Modes; Wire Selection; Shielded Gas Selection; and Gas Metal Arc Welding Joints in All Positions.

GENERAL EDUCATION CORE COMPETENCIES

STC has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

STUDENT REQUIREMENTS

Tests and assignments must be completed on the specified date. Students are also responsible for policies and procedures in the STC E-Catalog.

ATTENDANCE GUIDELINES

Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of "F" (Failing 0-59) and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an "F" in a course.

STUDENTS WITH DISABILITIES

Students with disabilities who believe that they may need accommodations in this class based on the impact

of a disability are encouraged to contact the appropriate campus coordinator to request services.

Swainsboro Campus: [Daphne Scott \(dscott@southeasterntech.edu\)](mailto:dscott@southeasterntech.edu) 478-289-2274, Building 1, Room 1210.

Vidalia Campus: [Helen Thomas \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165.

SPECIFIC ABSENCES

Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

PREGNANCY

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please make arrangements with the appropriate campus coordinator.

Swainsboro Campus: [Daphne Scott \(dscott@southeasterntech.edu\)](mailto:dscott@southeasterntech.edu) 478-289-2274, Building 1, Room 1210.

Vidalia Campus: [Helen Thomas \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165.

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery **MAY NOT** be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up missed assignments.

WITHDRAWAL PROCEDURE

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form.

Students who are dropped from courses due to attendance after drop/add until the 65% point of the semester will receive a "W" for the course.

Important – Student-initiated withdrawals are not allowed after the 65% point. Only instructors can drop students after the 65% point for violating the attendance procedure of the course. Students who are dropped from courses due to attendance after the 65% point will receive either a "WP" (Withdrawn Passing) or "WF" (Withdrawn Failing) for the semester.

Informing your instructor that you will not return to his/her course, does not satisfy the approved withdrawal procedure outlined above.

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. A grade of "W" will count in attempted hour calculations for the purpose of Financial Aid.

MAKEUP GUIDELINES (TESTS, QUIZZES, HOMEWORK, PROJECTS, ETC...)

Makeup test will be given on the following class meeting date with an acceptable excuse approved by the instructor; any test not made up will result in the student receiving a zero.

ACADEMIC DISHONESTY POLICY

The STC Academic Dishonesty Policy states All forms of academic dishonesty, including but not limited to

cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline. The policy can also be found in the STC Catalog and Student Handbook.

PROCEDURE FOR ACADEMIC MISCONDUCT

The procedure for dealing with academic misconduct and dishonesty is as follows:

1. First Offense

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

2. Second Offense

Student is given a grade of "WF" for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

3. Third Offense

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of third offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

STATEMENT OF NON-DISCRIMINATION

The Technical College System of Georgia (TCSG) and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member, or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered programs, federally financed programs, educational programs and activities involving admissions, scholarships and loans, student life, and athletics. It also applies to the recruitment and employment of personnel and contracting for goods and services.

All work and campus environments shall be free from unlawful forms of discrimination, harassment and retaliation as outlined under Title IX of the Educational Amendments of 1972, Title VI and Title VII of the Civil Rights Act of 1964, as amended, the Age Discrimination in Employment Act of 1967, as amended, Executive Order 11246, as amended, the Vietnam Era Veterans Readjustment Act of 1974, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Americans With Disabilities Act of 1990, as amended, the Equal Pay Act, Lilly Ledbetter Fair Pay Act of 2009, the Georgia Fair Employment Act of 1978, as amended, the Immigration Reform and Control Act of 1986, the Genetic Information Nondiscrimination Act of 2008, the Workforce Investment Act of 1998 and other related mandates under TCSG Policy, federal or state statutes.

The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity.

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer	Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer
Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1 st Street, Vidalia Office 165 Phone: 912-538-3126 Email: Helen Thomas (hthomas@southeasterntech.edu)	Melanie Walker, Director of Human Resources Vidalia Campus 3001 East 1 st Street, Vidalia Office 138B Phone: 912-538-3230 Email: Melanie Walker (mwalker@southeasterntech.edu)

ACCESSIBILITY STATEMENT

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on STC’s website.

ACCESS TO TECHNOLOGY

Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the [STC website](#).

TCSG GUARANTEE/WARRANTY STATEMENT

The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.

GRADING POLICY

Assessment/Assignment	Percentage
Hands On Assignments	100%

GRADING SCALE

Letter Grade	Range
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

WELD 1090 Gas Metal Arc Welding

Fall Semester 2023 Lesson Plan

Aug-August Sep-September Oct-October Nov-November

Date	Chapter	Content	Assignments & Tests Due Dates	Competency
Aug 21	Gas Metal Arc Welding Set Up and Electrode Selection	First day of class/Class Introduction—Syllabi, Outline, Rules, Regulations Coverage, Library Resources and tour. Gas Metal Arc Welding Set Up and Electrode Selection	Refreshing of proper Gas Metal Arc Welding Set Up and Electrode Selection by instructor. Demonstration given of Gas Metal Arc Welding of Padded Plate; students practicing Gas Metal Arc Welding of Padded plate.	1,2,3,4,5,6,A,B,C
23	Surfacing, Padded Plate	Surfacing, Padded Plate	Students practicing welding a padded plate.	1,2,3,4,5,6,A,B,C
28	Surfacing, Padded Plate	Surfacing, Padded Plate	Students practicing welding a padded plate.	1,2,3,4,5,6,A,B,C
30	Surfacing, Padded Plate	Surfacing, Padded Plate	Students practicing welding a padded plate.	1,2,3,4,5,6,A,B,C
Sep 4	HOLIDAY	NO CLASS	NO CLASS	HOLIDAY
6	Surfacing, Padded Plate	Surfacing, Padded Plate	Students practicing welding a padded plate.	1,2,3,4,5,6,A,B,C
11	Surfacing, Padded Plate	Surfacing, Padded Plate	Students practicing welding a padded plate.	1,2,3,4,5,6,A,B,C
13	Surfacing, Padded Plate	Surfacing, Padded Plate	Students practicing welding a padded plate.	1,2,3,4,5,6,A,B,C
18	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Demonstration given by instructor on how to fit up and weld a Tee Joint using multi- pass fillet welds, students practicing making multipass fillet welds on Tee Joints.	1,2,3,4,5,6,A,B,C
20	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multipass fillet welds on Tee Joints.	1,2,3,4,5,6,A,B,C
25	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multipass fillet welds on Tee Joints.	1,2,3,4,5,6,A,B,C
27	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multipass fillet welds on Tee Joints.	1,2,3,4,5,6,A,B,C
Oct 2	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multipass fillet welds on Tee Joints.	1,2,3,4,5,6,A,B,C
4	Corner Joint	Corner Joint	Demonstration given by instructor on how to fit up and weld a corner joint using multi- pass fillet welds. Students practicing welding corner joints using multi- pass fillet welds.	1,2,3,4,5,6,A,B,C
9	Corner Joint	Corner Joint	Students practicing welding corner joints using multi-pass fillet welds.	1,2,3,4,5,6,A,B,C

Date	Chapter	Content	Assignments & Tests Due Dates	Competency
11	Corner Joint	Corner Joint	Students practicing welding corner joints using multi-pass fillet welds.	1,2,3,4,5,6,A,B,C
16	Lap Joint	Lap Joint	Demonstration given by instructor on how to fit up and weld a lap joint using multi-pass fillet welds. Students practicing welding lap joints using multi-	1,2,3,4,5,6,A,B,C
18	Lap Joint	Lap Joint	Students practicing welding lap joints using multi-pass fillet welds.	1,2,3,4,5,6,A,B,C
23	Lap Joint	Lap Joint	Students practicing welding lap joints using multi-pass fillet welds.	1,2,3,4,5,6,A,B,C
25	Square Butt Joint	Square Butt Joint	Demonstration given by instructor on how to properly weld a square butt joint. Students practicing welding square butt joints.	1,2,3,4,5,6,A,B,C
30	Square Butt Joint	Square Butt Joint	Students practicing welding square butt joints.	1,2,3,4,5,6,A,B,C
Nov 1	Edge Joint	Edge Joints	Demonstration given by instructor on how to properly weld an edge joint. Students practicing welding edge joints.	1,2,3,4,5,6,A,B,C
6	Edge Joint	Edge Joints	Students practicing welding edge joints.	1,2,3,4,5,6,A,B,C
8	Weld All Around	Weld All Around	Demonstration given by instructor as to how to successfully fit up and weld a weld all around using ½ multi-pass fillet welds. Students practicing weld all around.	1,2,3,4,5,6,A,B,C
13	Weld All Around	Weld All Around	Students practicing weld all around.	1,2,3,4,5,6,A,B,C
15	Weld All Around	Weld All Around	Students practicing weld all around.	1,2,3,4,5,6,A,B,C
20	HOLIDAY	HOLIDAY	HOLIDAY	HOLIDAY
22	HOLIDAY	HOLIDAY	HOLIDAY	HOLIDAY
27	Weld All Around	Weld All Around	Students practicing weld all around.	1,2,3,4,5,6,A,B,C
29	Beveled Plate	Beveled Plate	Demonstration given by instructor on how to successfully weld a beveled plate. Students practicing on beveled plate.	1,2,3,4,5,6,A,B,C
Dec 4	Beveled Plate/Course Eval.	Beveled Plate /Course Evaluation	Students practicing on beveled plate.	1,2,3,4,5,6,A,B,C
6	Beveled Plate	Beveled Plate	Students practicing on beveled plate	1,2,3,4,5,6,A,B,C
11	Beveled Plate	Beveled Plate	Students practicing on beveled plate	1,2,3,4,5,6,A,B,C

Competency Areas:

1. Gas Metal Arc Welding Safety Practices and Health Practices
2. Gas Metal Arc Welding Theory, Machines and Set Up
3. Transfer Modes
4. Wire Selection
5. Shielded Gas Selection
6. Gas Metal Arc Welding Joints in All Positions

General Core Educational Competencies

- a) The ability to utilize standard written English.
- b) The ability to solve practical mathematical problems.
- c) The ability to read, analyze, and interpret information.