



## **WELD 1090 Gas Metal Arc Welding COURSE SYLLABUS Summer Semester 2021**

### **COURSE INFORMATION**

Credit Hours/Minutes: 4 Credit Hours / 4500 Minutes

Campus/Class Location: Swainsboro Campus / Building 6 Room 6107

Class Meets: M/W 8:00 AM – 12:20PM

Course Reference Number (CRN): 60162

### **Instructor Contact Information**

Instructor Name: Chris Cumbee

Email Address: [Chris Cumbee \(ccumbee@southeasterntech.edu\)](mailto:ccumbee@southeasterntech.edu)

Campus/Office Location: Swainsboro Campus / Building 6 Room 6106

Office Hours: Monday through Thursday 7:00 am until 8:00 am

Phone: 478-289-2325

### **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 \(http://www.southeasterntech.edu/student-affairs/catalog-handbook.php\)](http://www.southeasterntech.edu/student-affairs/catalog-handbook.php).

### **REQUIRED TEXT**

### **REQUIRED SUPPLIES & SOFTWARE**

Spiral notebook, pen, highlighter, welding helmet, welding jacket, clear safety glasses, welding gloves, ear plugs, chipping hammer, half round file with tang, wire brush, wire cutters, Shade 5 cutting glasses, striker, Vice grips, combination square, torpedo level, ball peen hammer, 12" Crescent Wrench, 12' tape measure and a 4 ½" angle grinder. All students must have these items by the 2nd week of class; no exceptions.

**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.

### **MAJOR COURSE COMPETENCIES**

GMAW safety and health practices; GMAW theory; machines, and set up: transfer modes; wire selection;

shielded gas selection; and GMAW joints in all positions.

## **PREREQUISITE(S)**

None

## **COURSE OUTLINE**

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

## **GENERAL EDUCATION CORE COMPETENCIES**

Southeastern Technical College 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 student catalog/handbook.

## **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:** Macy Gay [mgay@southeasterntech.edu](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1208

**Vidalia Campus:** Helen Thomas [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 108

## **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:** Macy Gay [mgay@southeasterntech.edu](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1208

**Vidalia Campus:** Helen Thomas [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 108

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.

Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which the student is enrolled, the student has earned the right to a letter grade and will receive a grade for the course. Please note: Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of "F" (Failing 0-59) being assigned.

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.)**

Assignments are due on specified dates and will not be accepted after due date.

## **ACADEMIC DISHONESTY POLICY**

The Southeastern Technical College Academic Dishonesty Policy states that 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 Southeastern Technical College Catalog and 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" (Withdrawn Failing) 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 and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, sex, 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 school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

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

<p><b>American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer</b></p>	<p><b>Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer</b></p>
<p>Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1<sup>st</sup> Street, Vidalia Office 108 Phone: 912-538-3126 Email: <a href="mailto:Helen.Thomas@southeasterntech.edu">Helen Thomas</a> <a href="mailto:hthomas@southeasterntech.edu">hthomas@southeasterntech.edu</a></p>	<p>Lanie Jonas, Director of Human Resources Vidalia Campus 3001 East 1<sup>st</sup> Street, Vidalia Office 138B Phone: 912-538-3230 Email: <a href="mailto:Lanie.Jonas@southeasterntech.edu">Lanie Jonas</a> <a href="mailto:ljonas@southeasterntech.edu">ljonas@southeasterntech.edu</a></p>

**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 Southeastern Technical College’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 [Southeastern Technical College \(STC\) Website \(www.southeasterntech.edu\)](http://www.southeasterntech.edu).

## TECHNICAL COLLEGE SYSTEM OF GEORGIA (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
Lab 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 Summer Semester 2021 Lesson Plan

<b>Date/Week</b>	<b>Chapter/Lesson</b>	<b>Content</b>	<b>Assignments &amp; Tests Due Dates</b>	<b>Competency Area</b>
Week 1 05/17/2021 and 05/19/2021	GMAW	First day of class/Class Introduction—Syllabi, Outline, Rules, Regulations Coverage, Library Resources and tour. GMAW Set Up and Electrode Selection. Demonstration of all the welds required for the class.	Reminder of proper GMAW Set Up and Electrode Selection by instructor. Demonstration given of GMAW of Padded Plate; students practicing GMAW of Padded plate.	1,2,3,4,5,6,A,B,C
Week 2 05/24/2021 and 05/26/2021	GMAW	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multi-pass fillet welds on Tee Joints, Students practicing completing multi pass Tee Joints.	1,2,3,4,5,6,A,B,C
Week 3 05/31/2021 and 06/02/2021	GMAW	Lap Joint, Multi-Pass fillet Welds	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-pass fillet welds.	1,2,3,4,5,6,A,B,C
Week 4 06/07/2021 and 06/09/2021	GMAW	Edge Joint	Demonstration given by instructor on how to properly weld an Edge joint. Students practicing welding Edge joint.	1,2,3,4,5,6,A,B,C
Week 5 06/14/2021 and 06/16/2021	GMAW	Corner Joint	Demonstration given by instructor on how to fit up and weld an outside corner joint. Students practicing welding Corner joints.	1,2,3,4,5,6,A,B,C

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
Week 6 06/21/2021 through 06/23/2021	GMAW	Staggered Intermittent Fillet Weld	Demonstration given by instructor on how to fit up and weld a Staggered Intermittent Fillet Weld. Students practicing welding Staggered Intermittent Fillet Weld.	1,2,3,4,5,6,A,B,C
Week 7 06/28/2021 and 06/30/2021	GMAW	Intermittent Fillet Weld	Demonstration given by instructor on how to fit up and weld an Intermittent Fillet weld. Students practicing welding Intermittent Fillet Weld.	1,2,3,4,5,6,A,B,C
Week 8 07/05/2021 and 07/07/2021	Summer Break No Class	Summer Break No Class	Summer Break No Class	Summer Break No Class
Week 9 07/12/2021 and 07/14/2021	GMAW	Weld All Around	Demonstration given by instructor on how to fit up and weld a Weld All Around. Students practicing Weld All Around.	1,2,3,4,5,6,A,B,C
Week 10 07/19/2021 and 07/21/2021	GMAW	Square Butt Joint	Demonstration given by instructor on how to properly weld a square butt joint. Students practicing welding square butt joints. All welding assignments are due 7/26/2021	1,2,3,4,5,6, A, B, C
07/26/2021	Semester Ends	Semester Ends	Semester Ends	

**COMPETENCY AREAS: (WILL VARY FOR EACH COURSE/TAKEN FROM STATE STANDARDS)**

1. GMAW Safety Practices and Health Practices
2. GMAW Theory, Machines and Set Up
3. Transfer Modes
4. Wire Selection

5. Shielded Gas Selection
6. GMAW 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.