



**WELD1110 Gas Tungsten Arc Welding  
COURSE SYLLABUS  
Summer Semester 2022 (202216)**

**COURSE INFORMATION**

Credit Hours/Minutes: 4/4500

Class Location: Room 6106

Class Meets: **M/W 8:00 AM-12:20PM**

CRN: 60021

**INSTRUCTOR CONTACT INFORMATION**

Instructor Name: Mr. Nicholas Toole & Mr. Jason McDonald

Office Location: Room 6106

Office Hours: **M-R 7:00-8:00AM**

Email Address: [ntoole@southeasterntech.edu](mailto:ntoole@southeasterntech.edu)/[jmcdonald@southeasterntech.edu](mailto:jmcdonald@southeasterntech.edu)

Phone: 478-289-2242

Fax Number: 478-289-2276

Tutoring Hours (if applicable): N/A

**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**

Each student should have the following: Long Sleeve Shirt or welding jacket, pair of work boots, welding helmet, gloves, safety glasses, 4 ½" grinder, vice grips, wire brush and Klines or heavy-duty wire cutters. 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**

This course provides knowledge of theory, safety practices, inert gas, equipment, and techniques for successful gas tungsten arc welding. Qualification tests, all positions, are used in the evaluating of student progress toward making industrial standard welds. Topics include: GTAW safety and health practices, shielding gases, metal cleaning procedures, GTAW machines and set up, selection of filler rods, GTAW Weld positions, and production of GTAW beads, bead patterns, and joints.

## MAJOR COURSE COMPETENCIES

1. GTAW Safety and Health Practices
2. Shielding Gases
3. Metal Cleaning Procedures
4. GTAW Machines and Set Up
5. Selection of Filler Rods
6. GTAW Weld Positions
7. Production of GTAW Beads, Bead Patterns, and Joints

## PREREQUISITE(S)

All required

## COURSE OUTLINE

GTAW Safety and Health practices, Shielding Gases, Metal Cleaning procedures, GTAW machines and set up, Selection of Filler Rods, GTAW Weld positions, and Production of GTAW Beads, Bead Patterns, and Joints.

## 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 the STC E-Catalog.

## COVID-19 MASK REQUIREMENT

Regardless of vaccination status, students are highly encouraged to wear masks or face coverings while in a classroom or lab at Southeastern Technical College. Masking may be implemented in some program areas (i.e. Health Sciences and Cosmetology) where students, faculty, and clients are in close proximity and social distancing cannot be maintained. This measure is being implemented to reduce COVID-19 related health risks for everyone engaged in the educational process. Masks or face coverings must be worn over the nose and mouth, in accordance with the Centers for Disease Control and Prevention (CDC).

## COVID-19 SIGNS AND SYMPTOMS

We encourage individuals to monitor for the signs and symptoms of COVID-19 prior to coming on campus.

If you have experienced the symptoms listed below or have a body temperature 100.4°F or higher, we encourage you to self-quarantine at home and contact a primary care physician's office, local urgent care facility, or health department for further direction. Please notify your instructor(s) by email and do not come on campus for any reason.

COVID-19 Key Symptoms
Fever or felt feverish
Chills
Shortness of breath or difficulty breathing (not attributed to any other health condition)

<b>COVID-19 Key Symptoms</b>
Fatigue
Muscle or body aches
Headache
New loss of taste or smell
Sore throat (not attributed to any other health condition)
Congestion or runny nose (not attributed to any other health condition)
Nausea or vomiting
Diarrhea
<b>In the past 14 days, if you:</b>
Have had close contact with or are caring for an individual diagnosed with COVID-19 at home (not in healthcare setting), please do not come on campus and contact your instructor (s).

### **COVID-19 SELF-REPORTING REQUIREMENT**

Students, regardless of vaccination status, who test positive for COVID-19 or who have been exposed to a COVID-19 positive person, are required to self-report using <https://www.southeasterntech.edu/covid-19/>. Report all positive cases of COVID-19 to your instructor and [Stephannie Waters](#), Exposure Control Coordinator, [swaters@southeasterntech.edu](mailto:swaters@southeasterntech.edu), 912-538-3195.

### **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 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 \(dscott@southeasterntech.edu\)](#) 478-289-2274, Building 1, Room 1210.  
 Vidalia Campus: [Helen Thomas \(hthomas@southeasterntech.edu\)](#), 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% portion of the semester (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" is assigned when the student completes the withdrawal form from the course.

Students who are dropped from courses due to attendance (see your course syllabus for attendance policy) after drop/add until the 65% point of the semester will receive a "W" for the course. Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of 'F' being assigned.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

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. All grades, including grades of 'W', will count in attempted hour calculations for the purpose of Financial Aid.

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

## **EXIT EXAM**

There is no exit exam for this course.

## **WORK ETHICS**

The Technical College System of Georgia instructs and evaluates students on work ethics in all programs of study. Ten work ethics traits have been identified and defined as essential for student success: appearance, attendance, attitude, character, communication, cooperation, organizational skills, productivity, respect, and teamwork. Students will be required to take a work ethics exam as marked in the lesson plan. A grade of 70 or better is required to complete the work ethics requirements for this class.

## **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 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**

As set forth in the student catalog, Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, sex, religion, disability, age, political affiliation or belief, genetic information, veteran status, or citizenship status (except in those special circumstances permitted or mandated by law)

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

<b>American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer</b>	<b>Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer</b>
Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1 <sup>st</sup> Street, Vidalia Office 165 Phone: 912-538-3126 Email: <a href="mailto:Helen.Thomas@southeasterntech.edu">Helen.Thomas@southeasterntech.edu</a>	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@southeasterntech.edu</a>

## **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**

<b>Assessment/Assignment</b>	<b>Percentage</b>
Hands On Assignments	100%

## **GRADING SCALE**

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

## CRN60021 Gas Tungsten Arc Welding Summer Semester 2022 Lesson Plan

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
May 16	GTAW Set Up and Electrode Selection	First day of class/Class Introduction— Syllabi, Outline, Rules, Regulations Coverage, Library Resources and tour. GTAW Set Up and Electrode Selection	Refreshing of proper GTAW Set Up and Electrode Selection by instructor. Demonstration given of GTAW of Padded Plate; students practicing GTAW of Padded plate.	1,2,3,4, A, B, D
18	Surfacing, Padded Plate	Surfacing, Padded Plate	Students practicing welding a padded plate.	1,2,3,4, A, C
23	Surfacing, Padded Plate	Surfacing, Padded Plate	Students practicing welding a padded plate.	1,2,3,4, A, C
25	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 multi-pass fillet welds on Tee Joints in all positions.	1,2,3,4, A, C
30	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multi-pass fillet welds on Tee Joints.	1,2,3,4, A, C
June 1	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multi-pass fillet welds on Tee Joints.	1,2,3,4, A, C
6	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multi-pass fillet welds on Tee Joints.	1,2,3,4, A, C
8	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multi-pass fillet welds on Tee Joints.	1,2,3,4, A, C
13	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multi-pass fillet welds on Tee Joints.	1,2,3,4, A, C
15	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multi-pass fillet welds on Tee Joints.	1,2,3,4, A, C
20	Tee Joints, Multi- Pass Fillet Welds	Tee Joints, Multi-Pass Fillet Welds	Students practicing making multi-pass fillet welds on Tee Joints.	1,2,3,4, A, C
22	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Demonstration given by instructor on how to fit up and weld a Corner Joint, Lap Joint, Edge Joint and a Butt Joint. Students practicing.	1,2,3,4, A, C
27	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Students practicing welding: corner, lap, edge and butt joints.	1,2,3,4, A, C

Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
29	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Students practicing welding: corner, lap, edge and butt joints.	1,2,3,4, A, C
July 4	HOLIDAY	HOLIDAY	NO CLASS	NO CLASS
6	HOLIDAY	HOLIDAY	NO CLASS	NO CLASS
11	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Students practicing welding: corner, lap, edge and butt joints.	1,2,3,4, A, C
13	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Students practicing welding: corner, lap, edge and butt joints.	1,2,3,4, A, C
18	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Students practicing welding: corner, lap, edge and butt joints.	1,2,3,4, A, C
20	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Students practicing welding: corner, lap, edge and butt joints.	1,2,3,4, A, C
25	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Students practicing welding: corner, lap, edge and butt joints.	1,2,3,4, A, C
27	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Corner Joint, Lap Joint, Edge Joint, Butt Joint	Students practicing welding: corner, lap, edge and butt joints.	1,2,3,4, A, C

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

1. GTAW Safety Practices and Health Practices
2. Selection and Applications of Electrodes for GTAW
3. GTAW Joints
4. GTAW to Specification

**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.

**Below is the rubric that I will be using to grade your assignments.**




<b>Name:</b>	<b>Date:</b>
<b>Course/Process:</b>	
<b>Position:</b>	
<b>Type(s) of Weld(s):</b>	

Criteria	Teacher Evaluation	Possible Points
Appearance (Pinholes, undercut, width, height, etc.)		25
Tie Ins (Beads tied into base metal, and previous weld)		25
Uniformity (Straight beads, same width, etc.)		25
Slag Inclusions (Trapped slag as a result of poor tie ins)		25
<b>TOTAL</b>		<b>100</b>

<b>Legend:</b>		
<b>0-10 Pts. (No tie ins, excessive pinholes, trapped slag, poor uniformity)</b>		
<b>11-19 Pts. (Mostly tied in, less than half the weld has pinholes, very little trapped slag, mostly uniform)</b>		
<b>20-25 Pts. (Beads are tied in, no slag, no undercut, no pinholes, very uniform)</b>		

<b>Comments:</b>
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