



TENTATIVE – SUBJECT TO CHANGE

**ELTR 1020 – Alternating Current Fundamentals**  
**COURSE SYLLABUS**  
**Online**  
**Spring Semester 2021 (202114)**

**COURSE INFORMATION**

Credit Hours/Minutes: 3 Credit Hours/ 3000 Minutes  
Campus/Class Location: Vidalia Main Campus/ Lab 429  
Class Meets: 40% Hybrid/ 60% F2F, 8:00AM-12:20PM Monday; October 12-December 7  
CRN: 20022  
Preferred Method of Contact: STC Email

**INSTRUCTOR CONTACT INFORMATION**

**Adjunct Instructor's Name:** Glen Stone  
Adjunct College Email Address: [Glen Stone \(gstone@southeasterntech.edu\)](mailto:gstone@southeasterntech.edu)  
Campus/Office Location: No office on campus  
Office Hours: N/A (Not Applicable)  
Phone: N/A Fax Number: N/A

**Full-Time Instructor's Name:** Tony Criswell  
Email Address: [Tony Criswell \(tcriswell@southeasterntech.edu\)](mailto:tcriswell@southeasterntech.edu)

**Campus/Office Location:**

Swainsboro: Building 6 Lab 6102  
Vidalia: Main- Lab 429

**Office Hours:**

Swainsboro Campus: Monday and Wednesday 1:30PM- 3:45PM  
Vidalia Campus: Tuesday and Thursday 1:30PM- 3:45PM  
Phone: 478-289-2235 Fax Number: 478-289-2276

Tutoring Hours: Available upon request

**SOUTHEASTERN TECHNICAL COLLEGE (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 \(https://catalog.southeasterntech.edu/college-catalog/downloads/current.pdf\)](https://catalog.southeasterntech.edu/college-catalog/downloads/current.pdf).

**REQUIRED TEXT**

Electricity 11th edition, Goodheart-Wilcox Publishers. ISBN: 978-1-63563-472-3

**REQUIRED SUPPLIES & SOFTWARE**

Note: Although students can use their smart phones and tablets to access their online course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither

Blackboard nor Georgia Virtual Technical Connection (GVTC) provide technical support for issues relating to the use of a smart phone or tablet, so students are advised to not rely on these devices to take an online course.

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

### **COURSE DESCRIPTION**

Introduces the theory and application of varying sine wave voltages and current. Topics include magnetism, AC wave generation, AC test equipment, inductance, capacitance, and basic transformers.

### **MAJOR COURSE COMPETENCIES**

Electrical Safety, Magnetism, AC Wave Generation, AC Test Equipment, Inductance, Capacitance, and Basic Transformers.

### **PREREQUISITE(S)**

None

### **COURSE OUTLINE**

1. Electrical Safety
2. Magnetism
3. AC Wave Generation
4. AC Test Equipment
5. Inductance
6. Capacitance
7. Basic Transformers

### **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**

Class attendance is a very important aspect of a student's success in this course. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is expected. Students are expected to complete all work required by the instructor. Unannounced quizzes/assignments may be given. Students that miss an unannounced quiz or assignment will receive a grade of 0. Students are expected to complete all work shown on the attached assignment sheet. Students are also expected to complete all tests and comprehensive problems on the dates specified on the attached calendar. Students are responsible for policies and procedures included in the *STC Catalog*. **Electrical program students must earn a minimum grade of C in all courses to graduate.**

### **COVID-19 MASK REQUIREMENT**

Regardless of vaccination status, masks or face coverings must be worn at all times while in a classroom or lab of Southeastern Technical College. 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). A student's refusal to

wear a mask or face covering will be considered a classroom disruption and the student may be asked to leave campus and/or receive further discipline.

### 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)
Cough: new or worsening, not attributed to another health condition
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.

## HYBRID ATTENDANCE

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 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:Daphne.Scott@southeasterntech.edu), 478-289-2274, Building 1, Room 1210

**Vidalia Campus:** [Helen Thomas hthomas@southeasterntech.edu](mailto:Helen.Thomas@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:Daphne.Scott@southeasterntech.edu), 478-289-2274, Building 1, Room 1210

**Vidalia Campus:** [Helen Thomas hthomas@southeasterntech.edu](mailto:Helen.Thomas@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.

Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which 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.)**

Extenuating circumstances are determined at the instructor's discretion. Unless otherwise scheduled with the instructor, the student will be expected to take the test the next day, scheduled outside of regular class time. Failure to follow this procedure will result in a grade of zero.

Assignment due dates are listed on the attached lesson schedule. Students will be expected to have the assignment completed at the beginning of class on the date that it is due. It is within the instructor's discretion to accept or reject late assignments. Any late assignments accepted will be subject to a ten-point penalty each day the assignment is late. After three class meetings, no late assignments will be accepted; a zero will be recorded.

Unannounced quizzes are subject to be given on any day. A grade of zero will be assigned for any quizzes missed. There will be no makeup of quizzes. Any zeros recorded will be included in the final score calculation.

## **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 second 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:

<b>Americans 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:hthomas@southeasterntech.edu">Helen Thomas</a> <a href="mailto:hthomas@southeasterntech.edu">hthomas@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:ljonas@southeasterntech.edu">Lanie Jonas</a> <a href="mailto:ljonas@southeasterntech.edu">ljonas@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's 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
Pre-Quiz	5%
Chapter Review Questions	5%
Test	35%
Labs	55%
<b>Total</b>	<b>100%</b>

**GRADING SCALE**

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

## ELTR 1020 Alternating Current Fundamentals

### Fall Semester 2021 Lesson Plan

Date	Lesson	Assignments & Tests Due Dates	Competency Area
October 12		<ul style="list-style-type: none"> <li>• Fall Semester B Begins</li> </ul>	
October 12-18	Introduction	<ul style="list-style-type: none"> <li>• Click on the link ELTR 1020 Course Documents in Blackboard. Then click on ELTR 1020 Syllabus and lesson plan and read the ELTR 1020 Course Syllabus/Lesson Plan.</li> <li>• Read all of the items under the "<b>Getting Started</b>" link.</li> <li>• <b>Complete the COVID 19 Presentation and Acknowledgement by January 19, 12:00PM</b></li> </ul>	A,B,C
October 18- November 1	Chapter 12- Magnetism	<ul style="list-style-type: none"> <li>• Read Chapter 12 Magnetism in your Textbook</li> <li>• Complete Chapter 12 Magnetism PowerPoint</li> <li>• Complete Chapter 12 Magnetism Review Questions</li> <li>• Complete Chapter 12 Magnetism Test</li> </ul>	1,2 A,B,C
November 1-8	Chapter 15- Alternating Current	<ul style="list-style-type: none"> <li>• Read Chapter 15 Alternating Current in your Textbook</li> <li>• Complete Chapter 15 Alternating Current PowerPoint</li> <li>• Complete Chapter 15 Alternating Current Review Questions</li> <li>• Complete Chapter 15 Alternating Current Test</li> <li>• Complete Lab on Alternating Current</li> </ul>	3,4 A,B,C
November 8	Mid-Term	<ul style="list-style-type: none"> <li>• There is no Mid-Term exam. This is letting you know that the Minimester A is half over</li> </ul>	
November 8-15	Chapter 16- Capacitance	<ul style="list-style-type: none"> <li>• Read Chapter 16 Capacitance in your Textbook</li> <li>• Complete Chapter 16 Capacitance PowerPoint</li> <li>• Complete Chapter 16 Capacitance Review Questions</li> <li>• Complete Chapter 16 Capacitance Test</li> <li>• Complete Lab on Capacitance</li> </ul>	6 A,B,C
November 15	65% Point	<ul style="list-style-type: none"> <li>• Last day for students to formally withdraw from Term B classes without academic penalty</li> </ul>	
November 22-29	Chapter 17- Inductance	<ul style="list-style-type: none"> <li>• Read Chapter 17 Inductance in your Textbook</li> <li>• Complete Chapter 17 Inductance PowerPoint</li> <li>• Complete Chapter 17 Inductance Review Questions</li> <li>• Complete Chapter 17 Inductance Test</li> </ul>	5 A,B,C
November 29- December 6	Chapter 18- Transformers	<ul style="list-style-type: none"> <li>• Read Chapter 18 Transformers in your Textbook</li> <li>• Complete Chapter 18 Transformers PowerPoint</li> <li>• Complete Chapter 18 Transformers Review Questions</li> <li>• Complete Chapter 18 Transformers Test</li> <li>• Complete Lab on Transformers</li> </ul>	7 A,B,C
December 7	Semester Ends	<ul style="list-style-type: none"> <li>• Last Day of Fall B-Semester 2021</li> </ul>	



**COMPETENCY AREAS:**

1. Electrical Safety
2. Magnetism
3. AC Wave Generation
4. AC Test Equipment
5. Inductance
6. Capacitance
7. Transformers

**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.