

## Instructor Information

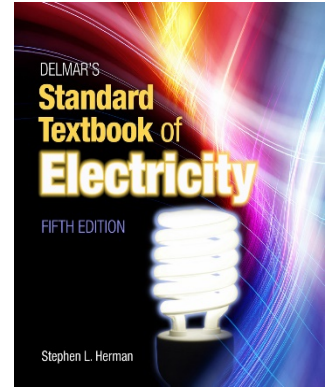
Dr. Eric Busby  
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Email: eric.busby@sulross.edu  
Office Hours: By Appointment

**Class Time and Location:** Tuesday & Thursday  
1:00pm – 2:50pm  
Industrial Technology Building RM 103

### Required Textbook:

Delmar's Standard Textbook of Electricity, 5th Edition  
Author(s): Stephen L. Herman  
Publisher: Cengage Learning  
ISBN-10: 1-111-53915-4; ISBN-13: 978-1111539153



### Reference (Not Required to Purchase):

There will also be additional reading material assigned in the form of handouts that contain industry related information. Students will be responsible for that information on tests and quizzes.

## Course Description

This course examines the generation, theory and use of electricity. Included in this course will be electrical and shop safety, study of AC and DC theory, AC and DC circuits and their components, electrical symbols, and the proper use of electrical test equipment. Students will learn the principles of direct current and alternating current electricity. Applications of series, parallel, and series parallel circuitry including Ohm's Law, Kerchhoff's Laws, batteries, meters, resistance, capacitance, inductance, magnetism, and electromagnetism.

## Student Learning Outcomes

This course is designed to meet one or more of the following Student Learning Outcomes:

1. Students will learn concepts in electricity and electrical power technology.
2. Students will demonstrate an understanding of the physical properties of electricity.
3. Students will demonstrate an understanding of both the general and electrical safety practices as required by OSHA and industry standards.
4. Students will develop skill and proficiency in the ability to present clearly identified solutions using graphical communication conventions and standards used in industry.

## Course Objectives

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Upon completion of this course the student will be able to:

- Demonstrate an understanding of the following topics by correctly answering various styles of questions presented on worksheets and tests and completing a variety of lab and written exercises.
- Explain basic electrical concepts, including electric charge, current, electrical potential, electrical power, and energy.
- Use basic mathematical skills required to calculate results using Ohm's and Kirchhoff's Laws.
- Understand basic electrical circuits comprised of series, parallel and combination circuit.
- Use a variety of electrical test instruments.
- Demonstrate an understanding of the basics of Direct Current (DC) and the wiring circuitry associated with it.
- Understand the student will learn the basics of Alternating Current (AC) and the wiring circuitry associated with it
- Understand the use of capacitors and their use in AC circuits.

This class is to be a learning experience, and your participation is required for you to be successful. As such the class structure, lesson topics, and overall learning environment will emphasize more than just knowledge comprehension.

## SRSU Disability Services Statement

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Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Alpine students seeking accessibility/accommodations services must contact Mary Schwartz Grisham, M.Ed., LPC, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email [mschwartz@sulross.edu](mailto:mschwartz@sulross.edu). Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, SUI Ross State University, Alpine. Texas, 79832.

## Library Information

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The Bryan Wildenthal Memorial Library in Alpine offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, [library.sulross.edu](http://library.sulross.edu). Off-campus access requires logging in with your LoboID and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email ([srsulibrary@sulross.edu](mailto:srsulibrary@sulross.edu)), or phone (432-837-8123).

The Southwest Texas Junior College (SWTJC) Libraries at Uvalde, Del Rio, and Eagle Pass. Offer additional access to library spaces and resources. Del Rio, Eagle Pass, and Uvalde students may also use online resources available through SWTJC website, [library.swtjc.edu](http://library.swtjc.edu). The SWTJC Libraries serve as pick-up locations for Inter-Library Loan (ILL) and Document Delivery from the Alpine campus.

### **SRSU Distance Education Statement**

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Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are located in the student handbook.

### **Distance Education Non-Participation Statement**

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Policies in effect for on-campus, traditional classroom instruction courses also apply to students enrolled in distance education courses, including Web-based and ITV courses. The University allows a maximum of 20% absences in a course before an instructor may drop a student for excessive absences. In Web courses, this policy is interpreted as not participating for more than 3 weeks in a long semester, 1 week in a summer session, or 3 days in the midwinter session.

***Any student dropped for non-participation will receive an “F” in the course dropped. Inactivity may include the following:***

- not logging on to the course not submitting assignments
- not participating in scheduled activities
- not communicating with the instructor by phone or email, and/or
- not following the instructor's participation guidelines stated in the syllabus

Any student who has not logged on to this course or submitted assignments by October 24, 2022 will be considered to have exceeded the University's policy on “excessive absences” and may be automatically dropped from the course. Blackboard statistics track the logins made and document the sections of the course accessed. These statistics will be used by your professor as a factor in documenting your participation in the course.

***Your professor will use Blackboard statistics to document logins to the course and assignments accessed.***

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## **Diversity Statement**

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"I aim to create a learning environment for my students that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, socioeconomic class, age, nationality, etc.). I also understand that the crisis of COVID, economic disparity, and health concerns, or even unexpected life events could impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create an inclusive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you."

## **Classroom Climate of Respect**

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Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still, we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

## **Attendance and Participation**

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Attendance is necessary! Attendance and regular participation in the online classroom are essential for maintaining the best learning environment. Learning not only occurs between the student and course materials, but, just as importantly, peer to peer, professor to student, and student to professor. If you do not attend classes, you could lose your financial aid. You must attend and participate in your on-campus or online course(s) before the course certification date and continue beyond the course withdrawal date.

Participation in this course via the Internet is the responsibility of the student. Your instructor is also required by law to validate/certify your attendance in your on-campus or online course(s) in order for you to receive financial aid. To meet this attendance requirement in an online course, you must demonstrate academic activity to establish eligibility for federal student aid with activities such as, but not limited to, the following examples: initiating contact with your instructor to ask a question about the academic subject studied in the course, submitting an academic assignment, taking an exam, completing an interactive tutorial, participating in computer-assisted instruction, attending a study group that is assigned by the instructor, or participating in an online discussion about academic matters relating to the course.

NOTE: This Internet class demands that the student be self-motivated and self-disciplined. You are responsible to keep up with the schedule, assignments, and exams. I will be contacting you throughout the semester by email, and Blackboard which is always available.

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## **What You Should Understand About Internet Classes**

1. Be realistic about the amount of time required to do the coursework.
2. On-line is NOT easier!
3. Schedule class time just as if you were attending class on-campus
4. Turn in your work ON TIME
5. Participate actively in the class
6. ***Use e-mail and the discussion boards to communicate often with your instructor & classmates***
7. Log onto the class at least 5 times a week
8. Do NOT fall behind in your assignments
9. ASK for help when you need help

### **Class Structure**

The course is offered in both a traditional “Face-to-Face” and online format. This course is designed to be a guided study and not just dissemination of information. Strategies include: Reading resources (papers); lectures with assignment instructions and use of the discussion board through Blackboard; written assessments at midterm and final; use of the Internet; and e-mails among students and between individual students and the professor. There may be some step-by-step guided practice, individual assistance, and demonstrations during the scheduled class time in areas where there seems to be a need. It is essential that everyone be in attendance for the scheduled meetings for sharing information, demonstrations, activities, and so questions are answered. ***Students are responsible for completing all assigned work.***

### **Discussion Participation**

***Discussion topics are set up for each module; you are expected to contribute to each discussion by posting a comment and replying to at least 2 other posts. Five points can be earned for each discussion following the guidelines below. Spelling and grammar count.***

### **Time Commitment**

You will be expected to log on to the course site 5-6 times per week. You are also expected to participate in all assigned activities including discussions in the course. Students should be prepared to spend at least 4-6 hours per week outside of class on assignments that will include: Homework, Reading Assignments, Lab work and studying for tests and quizzes.

### **Academic Integrity**

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. A scholar is expected to be punctual, prepared, and focused; meaningful and pertinent participation is appreciated. Examples of academic dishonesty include but are not limited to: Turning in work as original that was used in whole or part for another course and/or professor; turning in another person’s work as one’s own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden.

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All students are expected to complete their own work at all times. Any dishonest conduct will be promptly rewarded with an immediate “F”.

### ***Plagiarism***

***A student guilty of plagiarism and/or cheating will receive a grade of “F” in the course involved and the grade will be so recorded on the transcript. Students giving and receiving assistance in any unauthorized manner during an examination will subject themselves to this cheating policy. A pattern of cheating will result in suspension.***

### **Assignments**

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**All assignments are to be submitted via Blackboard. No late work will be accepted without proper documentation or prior approval by the instructor.**

**Course Communication:** The official e-mail communications channel for this course is the Sul Ross State University e-mail account (yourname@sulross.edu) of each student and professor. For the purposes of this course, no other e-mail account is acceptable.

**Due dates:** All assignments and projects will be given due dates which must be met. All assignments will be due by 11:59 pm on the assigned day. Assignments and projects will not be accepted if they are turned in late without approval. **Late assignments will lose ten points per calendar day.** Students are responsible for meeting the deadlines even if classes are missed.

### **Grading Policy**

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All work will be graded on specific criteria using the following guidelines. Any worksheets will be graded on a points-per-answer basis. Any sketches and drawings assigned will be graded on a 100-point (percentage) scale. Criteria for grading will include accuracy of content, appropriateness of content for assignment, presentation, and clarity. Projects in the lab will be graded on accuracy, neatness, content, adherence to standards, adherence to assignment, and workmanship. Graded items will be broken into specific categories and presented on grade sheets given at the time the assignments are given.

Final grades will be determined by totals in these areas:

- 15% quizzes
- 25% final exam (comprehensive)
- 30% assignments: homework, lab work, and discussion participation
- 30% final project (group or individual project)

In the event one of the above categories is not completed during the course that percentage will automatically be divided between the other categories at the same level. All assignment points will be converted to percentages for individual assignment letter grades.

A=100-90;

B=89-80;

C=79-70;

D=69-60;

F=59-0

Grades will be earned on the basis that “C” is average work, “B” is above average work, and “A” is well above average work. Barring any unusual circumstances there will be **NO INCOMPLETES** given at the end of this semester.

## **Lab Time**

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As with all the Industrial Technology classes there will be a substantial amount of lab work to be done. Normally 6 hours outside of scheduled class time each week for researching, reading, and general homework is expected for college level work. All required research, lab work, and practice will be completed independently.

## **Supplies**

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There are some expendable supplies you will need for the class such as pencils (lead), erasers, and paper.

## **Quizzes**

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You will not be given advance notice of quizzes. They will be primarily written in nature. There will be no make-up quizzes.

## **Tests/Exams**

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**All exams will be given on the announced date.** The exams will cover material from class lecture and assigned readings. It is your responsibility to complete the exam when scheduled. Tests will be either administered through Blackboard using various styles of questions covering terminology, equipment, processes, and other items discussed. Participation for the tests is mandatory; no makeup tests will be given.

## **Midterm Exam**

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There will be no midterm exam given.

## **Final Exam**

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The final exam will be during the week of December 2, 5-7 2022. The specific date and time will be announced during the semester. The exam will include written, practical, and analytical portions, and will be comprehensive of the entire semester. Do not make any other plans for that day and time.

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