SAN JUAN COLLEGE

INST 1150 Applied Basic Dc Circuits Section Name Section Credit Hours Credits Syllabus

Course Information

Meeting times and location: section meeting_times section location

Catalog description: Introduction to electrical fundamentals, energy sources, Ohm's law, series/parallel/series-parallel circuit analysis, Kirchoff's law, battery/energy storage. Use of digital multimeters and other electronics instruments will be examined.

Prerequisites: Take MATH-113 or higher (MATH-130, MATH-115, MATH-160) or appropriate Math Accuplacer Score.

Terms offered: Fall and Spring

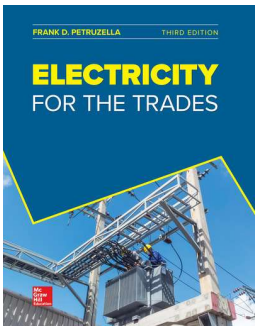
Section-specific Course Description:

Course Level Objectives

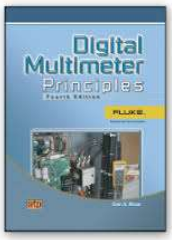
Upon successful completion of the course, the student will be able to…

1. Calculate voltage/current/resistance using Ohm’s law;
2. Perform circuit analysis using Kirchoff’s law in DC circuits;
3. Identify different energy source;
4. Measure voltage, current and resistance using Digital MultiMeters;
5. Calculate resistance using resistor color code;
6. Read schematic diagrams and wire DC circuits from schematics.
7. Describe different methods for energy storage.

Required Texts and/or Materials



Bundle: Electricity For The Trades
978-1-2591-4013-6
Frank D Petruzellal
McGrawHill
3rd



Digital Multimeter Principles
978-0-8269-1506-1
Glen A. Mazur
ATP
4th

Required Technology and Software

- Canvas
- Chrome, Safari, or Firefox

Course Requirements

Students are required to have

- **Safety glasses**
- **Texas Instruments TI-30XIIS Scientific Calculator**

Students will do the following activities:

- Lectures
- Hands-on labs
- Computer-based training
- Group activities
- Presentations, etc.

Other Classroom Policies and Expectations

The student will receive a copy of School of Energy General Policy, Waiver and Release form, and other related lab policies on the first day of the academic semester. The students are expected to read, acknowledge and be familiar with these policies and expectations.

To support the program mission of "Preparing students for successful careers as ICE technicians across various industries," a series of activities, events, and workshops has been designed alongside the courses. These will be integrated into different classes based on their relevance and the students' progress. Participation is encouraged, with certain activities being mandatory and counted toward attendance, assignments, or as prerequisites for specific courses.

Grading

The grading percentage and weight for each individual class is posted on the Canvas.

- A student must earn a grade “C” or higher in all courses in order to receive a degree.
- Grading Scale:
    - A 100-91
    - B 83-90
    - C 75-82
    - D 67-74
    - F Below
- Late Work Submission Policy
  All course work (including but not limited to assignments, quizzes, lab reports, sign-off sheets, projects, etc.) are expected to be submitted before the due date. All the late submissions will be penalized for 5% deduction per day, up to 25% of the grade. Students are highly encouraged to communicate with the class instructors in case of special circumstances.
- Check with your class instructor(s) for any additional grading policy for that class.

To determine final grades use the calculations above along with the table below...

Attendance	25%
Challenges	15%
Quizzes	20%
Final Exam	25%
Labs	15%

Total	100%

Course Time Commitment

15 hours outside class per week.

Canvas Participation and Expectations

Canvas participation is essential even for in-person classes. Students must regularly log into Canvas to view course policies, download materials, submit assignments, and check grades. Canvas serves as a central hub for all course-related information, ensuring students stay informed and up-to-date. Consistent use of Canvas to access resources, adhere to deadlines, and monitor academic progress is crucial.

Participation and Attendance Policy

INSTRUMENTATION CONTROL & ELECTRICAL TECHNOLOGY

CLASS ATTENDANCE POLICY

1. Attendance is 25% of the total grade. Attendance is recorded daily.
2. Attendance is graded in a 4-point format:

4	Arrive On-time, Participated the full session
3	Arrive Late or Leave Early
2	Arrive Late and Leave Early
1	Missed either class or lab or missed an hour of class
0	Absent

    1. The instructor determines if the absence can be excused using situational awareness based on the communication had with the student. Documentation may be requested by the instructor.
    2. Make-up Labs are allowed if the students have had appropriate communication with the instructors. The students need to make an appointment with the instructors for the make-up labs. If the students do not show up for the make-up lab appointment, no more make up labs will be granted for the rest of the semester.
    3. To receive a final grade above “C,” the attendance should be higher than 70%.

Instructor Response Times & Regular Interaction Expectations

Within 24 hours Monday - Thursday

Key Dates to Remember

Full Academic Calendar

Course Schedule

The course schedule, including the **daily lesson plan** and **assignment list**, is posted on Canvas.

It is highly recommended that students download these materials on the first day of class to stay organized and prepared. Regularly referring to the schedule will help students manage their time effectively and ensure they meet all deadlines. Keeping track of the daily lesson plan and assignments via Canvas is crucial for staying on top of coursework and being fully prepared for each class session.

Program Handbook

The School of Energy general policy and ICET lab policy are posted on Canvas. Students will receive a hard copy of these policies to review and sign on the first day of the academic semester. It is important to read and understand these policies thoroughly as they outline the standards and expectations for student conduct and safety in the lab.

Technical Support

Technical support is available through the San Juan College Help Desk 24/7/365. The help desk can be reached at 505-566-3266 or by creating a ticket at San Juan College Help Desk.

For password reset and and Canvas support, visit the Student Technology Guide website.

Accessibility/Privacy Policies for all Technology Tools Used

Accessibility/Privacy Policies for all Technology Tools Used

Student Support

At San Juan College, we are committed to supporting your academic success and overall well-being. We recognize that college life can be challenging and stressful, impacting both learning and personal health. We are here to help you succeed.

Academic Support and Resources

We provide a range of academic support services to help you stay on track on your educational journey. Free resources include tutoring, computer loans, life skills workshops, and so much more. Visit the Academic Support and Resources webpage to learn more about support and resources available through Academic Advising, the Tutoring Center, the Student Resource Center (formerly Student Achievement Center) and the Testing Center.

Student Support and Resources

If you or someone you know could benefit from counseling, accessibility services, career exploration, veteran transitional assistance, or any of our other support services, visit the Student Support and Resources webpage where you'll find detailed information about various resources available to you as an SJC student.

We encourage you to take advantage of these free resources to enhance your college experience and ensure your success.

College Policies and Resources for Current Students

The Student Handbook provides information on student support, student organizations, and student conduct policies at San Juan College.

The San Juan College catalog outlines the Academic Policies students need to know.

Healthy and Safe Practices for Being on Campus

We want a healthy and safe campus for students, faculty, staff, and guests.

Contagious diseases and your responsibility:

If you have COVID-19 symptoms, fever, flu or even the common cold, you should stay home. Do not come to campus if you are feeling sick. Contact your instructor about missing class (and review your

instructor's policies on missed or late work). Being sick does not necessarily excuse you from completing your work on time.

Safety on campus and your responsibility:

If you are on campus and experience or witness an emergency, call 9-1-1 first and then the Department of Public Safety at 505-566-3333 (or just 3333 if calling from a campus phone).

When you are on campus, be aware of your surroundings. If you need an escort to your vehicle, call 505-566-4444 (DPS non-emergency line) or 505-215-3091 (officer on duty line).

The College will send information for campus emergencies through SJC AlertAware, email and the webpage. Stay informed and stay safe.

Inclement Weather Information

Students will receive notification of class delays and cancellations due to inclement weather via the SJC AlertAware and SJC student email. Face-to-face classes will not meet in person; however, students are advised to check with instructors about alternative meeting options, as some may choose to meet via zoom. Hybrid classes will meet as scheduled via zoom. For questions regarding your class delay or cancelation, please contact your instructor.

Online Course Fee

Online Courses - San Juan College requires all online courses to include some form of assessment to demonstrate the mastery of course objectives. This could include exams, capstone projects, e-portfolios, presentations, final papers or other appropriate assessments. The use of a proctoring platform, plagiarism detection software or other method to ensure that assessments are completed by the enrolled student is required.

A course fee of $5.00 is assessed for all online courses at San Juan College to cover the cost of the above services. Students who are required to take a proctored exam and choose to use a physical testing center outside the SJC Testing Center or SJC Disability Services will be responsible for the cost of using that center.