

Thank you for choosing IVC! We are so happy to join you in your educational journey.

Basic Course Information

Semester:	Fall 2020	Instructor Name:	Sal Pulido
Course Title & #:	APLN106	Email:	smpulido@iid.com
CRN #:		Webpage (optional):	
Classroom:	LQ Comp Lab	Office #:	
Class Dates:	Aug 18 - Dec 8, 2020.	Office Hours:	
Class Days:	Tuesdays	Cell Phone #:	760-507-6254
Class Times:	4pm - 8:30pm	Emergency Contact:	
Units:	4		

Course Description

The basic principles in the construction, operation, and maintenance procedures associated with substations and switchyards. (Nontransferable, AA/AS degree only)

Course Prerequisite(s) and/or Corequisite(s)

Successful completion of APLN105.

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. recognize and deal appropriately with hazardous materials in the power utility industry. (ILO2, ILO3)
2. analyze, inspect, and test transformers. (ILO2, ILO3)
3. analyze, inspect, and test circuit breakers. (ILO2, ILO3)
4. analyze, inspect, and test relays. (ILO2, ILO3)

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Practice standard safety procedures appropriate to the power utility industry.
2. Recognize and deal appropriately with hazardous materials in the power utility industry.
3. Analyze, inspect, and test a transformer.
4. Analyze, inspect, and test a circuit breaker.
5. Analyze, inspect, and test a relay.

Textbooks & Other Resources or Links

Shoemaker, Thomas M. and James E. Mack 2017. The Lineman's and Cableman's Handbook 13th. New York. McGraw-Hill ISBN: 9780071850032.

Electrical Lineman Training Committee 2009. Imperial Irrigation District's Lineman Apprenticeship Training Handbook Imperial, CA. Imperial Irrigation District ISBN: -.

Distribution Transformer Handbook 4th. Alexander Publications
Bertrard Singer; Harry Forster and Mitchel E. Schutz

Basic Mathematics for Electricity and Electronics 8th. McGraw Hill

Course Requirements and Instructional Methods

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

Essay

Mid-Term/Final Exam(s)

Objective

Oral Assignments

Problem Solving Exercise

Quizzes

Skill Demonstration

Written Assignments

Class Activity

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Week 4 September 9	Capacitors & Reactors	
Week 5 September 16	Continued Capacitors & Reactors	
Week 6 September 23	Circuit Breakers #1	
Week 7 September 30	Continued- Circuit Breakers #1 Circuit Breakers #2	
Week 8 October 7	Continued – Circuit Breakers #2	Mid Term Exam
Week 9 October 14	Control Equipment	
Week 10 October 21	“High Voltage Terminations”	
Week 11 October 28	“High Voltage Terminations” Relays #1	
Week 12 November 4	Continued Relays #1	
Week 13 November 18	Relays #2	
Week 14 November 25	THANKSGIVING HOLIDAY – NO CLASSES Transformers 1, 2	
Week 15 December 2	FINAL EXAM	

*****Tentative, subject to change without prior notice*****

Attendance

[Required Information: The below information is the IVC attendance policy. Use this information in addition to any specific attendance policies you have for your course.]

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See [General Catalog](#) for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

[Required Information: Describe your policies regarding classroom conduct. The below is suggested language and may be modified for your course.]

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the [General Catalog](#).
- Children in the classroom: Due to college rules and state laws, only students enrolled in the class may attend; children are not allowed.

How do I act differently if I have an on-ground class during COVID?

- 1. DO NOT COME TO CAMPUS OR ATTEND AN OFF-CAMPUS CLASS IF YOU FEEL SICK, HAVE A FEVER, OR HAVE A COUGH**
 - a. Even if your symptoms are mild, stay home.
 - b. Email your instructor to explain why you are missing class.
 - c. [If you are sick with COVID-19 or think you might have COVID-19](#), provides CDC guidance.
 - d. If you have tested positive for COVID-19, you must self-quarantine for 14 days and then be without symptoms for at least 72 hours. Clearance is required prior to returning to any face-to-face interaction. It is recommended that you undergo a final COVID-19 test to confirm that you are no longer infected.

- e. If you are exposed through direct contact with a person known to be COVID-19 positive, then you must submit negative COVID-19 test results prior to returning to any face-to-face interaction.
- 2. ARRIVE AT CAMPUS EARLY (at least 15 minutes early is advised).**
 - a. All people entering the IVC campus will need to pass a screening process, which will occur at the gates as your drive onto campus. You will need to take a short questionnaire and get your temperature taken (the screening is completely touchless and will take place while you remain in your car).
- 3. BRING A MASK TO CLASS (and always wear it).**
 - a. Be sure that your mask covers both your nose and mouth. If your mask is cloth, then wash it each day. If your mask is disposable, then use a new one each day.
- 4. GO DIRECTLY TO YOUR CLASSROOM.**
 - a. The IVC campus is mostly closed so you should not visit other areas or seek any face-to-face services. Services are available to students online and can be accessed through www.imperial.edu.
- 5. WASH YOUR HANDS FREQUENTLY (and use the provided sanitation supplies).**
 - a. Your classroom is equipped with cleaning supplies. Use them as needed.
- 6. BE SURE TO SOCIAL DISTANCE (stay at least 6 feet from other).**
 - a. The number of students in a classroom at any one time is very limited so you have plenty of space to spread and ensure that you stay at least 6 feet from others.
- 7. BRING YOUR OWN FOOD AND DRINKS.**
 - a. There is no food service currently offered on campus.

Academic Honesty

[Required language.] Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the [General Catalog](#) for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test

information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Additional Services for Students

[Suggested Language.] Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

Disabled Student Programs and Services (DSPS)

[Required language.] Any student with a documented disability who may need educational accommodations should notify the instructor or the [Disabled Student Programs and Services \(DSP&S\)](#) office as soon as possible. When campus is open, the DSP&S office is in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

[Required language.] Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- **Student Health Center.** A Student Health Nurse is available on campus, but you must make an appointment. In addition, Pioneers Memorial Healthcare District provides basic health services for students, such as first aid and care for minor illnesses. Contact the IVC [Student Health Center](#) at 760-355-6128, or when campus reopens, visit Room 1536 for more information.
- **Mental Health Counseling Services.** Short-term individual, couples, family and group counseling services are available for currently enrolled students. Services are provided in a confidential, supportive, and culturally sensitive environment. Please contact the IVC Mental Health Counseling Services at 760-355-6310 for appointments, or when campus reopens visit Room 1536, for more information.

Extended Opportunity Program and Services (EOPS)

[Required language.] The Extended Opportunity Program and Services (EOPS) offers services such as priority registration, book grants, transportation assistance, individualized counseling, tutoring, and community referrals to eligible students. Our staff is available to assist and support students in navigating personal, psychological, academic, and/or career-related issues through empathy, cultural-competence, and a commitment to equity and social justice. Also under the umbrella of EOPS is the CARE (Cooperative Agency Resources for Education) Program, designed to serve single parents and assist with addressing issues that are particular to this population. Students that are single parents receiving TANF/Cash Aid assistance may qualify for our CARE program. For additional information about the EOPS or CARE Programs please contact our Program Office 760.335-6407 and/or visit our Program website www.imperial.edu/students/eops for eligibility criteria and application procedures. We look forward to serving you! - EOPS/CARE Staff

Student Equity Program

[Required language.] The Student Equity & Achievement Program strives to improve Imperial Valley College's success outcomes, particularly for students who have been historically underrepresented and underserved. The college identifies strategies to monitor and address equity issues, making efforts to mitigate any disproportionate impact on student success and achievement. Our institutional data provides insight surrounding student populations who historically, are not fully represented. SEA addresses disparities and/or disproportionate impact in student success across disaggregated student equity groups including gender, ethnicity, disability status, financial need, LGBTQIA+, Veterans, foster youth, homelessness, and formerly incarcerated students. The SEA Program also houses IVC's Homeless Liaison, Foster Youth Liaison, Formerly Incarcerated Liaison, and Military Affiliated Liaison, who provide direct services and referrals to students in need. SEA strives to empower students experiencing insecurities related to food, housing, transportation, textbooks, and shower access. We recognize that students who struggle meeting their basic needs are also at an academic and economic disadvantage, creating barriers to academic success and wellness. We strive to remove barriers that affect IVC students' access to enrollment, education, degree and certificate completion, and the ability to transfer to a university. SEA also provides outreach at local Imperial County high schools to ensure graduating seniors are successfully matriculated into the college and have a strong support system. Please visit us online for assistance at <https://imperial.edu/students/student-equity-and-achievement/> or call us at 760-355-6465 or when campus reopens, visit Building 401.

What if I cannot afford food, books, or need other help?

We have many resources that are available to you. Please tell us what you need by submitting your request(s) here: <https://imperial.edu/students/student-equity-and-achievement/>

Student Rights and Responsibilities

[Required language.] Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC [General Catalog](#).

Information Literacy

[Required language.] Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC [Library Department](#) provides numerous [Information Literacy Tutorials](#) to assist students in this endeavor.