



### Basic Course Information

Semester:	Spring 2021	Instructor Name:	Jesus Rosas
Course Title & #:	APLN 107	Email:	jarosas@iid.com
CRN #:	21715	Webpage (optional):	Imperial.edu
Classroom:	Zoom	Office #:	
Class Dates:	February 16, 2021 – June 11, 2021	Office Hours:	6am – 4:30pm (Tuesday – Friday)
Class Days:	Tuesday	Office Phone #:	760-455-2619
Class Times:	4:00pm – 8:15pm	Emergency Contact:	
Units:	4	Class Format:	Online

### Course Description

The basic principles in the construction, operation, and maintenance procedures associated with service installation, cable fault locating, compressor and pneumatic tools, and safety in transmission & distribution maintenance.

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

Successful completion of APLN106 with a “C” or better.

### Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by studying transmission & distribution T&D maintenance basics.

### Course Objectives

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

1. Practice service installation standards.
2. Understand cable fault locating (RADAR).
3. Identify and utilize compressors and pneumatic tools.
4. Recognize T&D maintenance safety standards.

## Textbooks & Other Resources or Links

1. Electrical Lineman, Training Committee (2009). *Imperial Irrigation District's Lineman Apprenticeship Training Handbook* Imperial, CA Imperial Irrigation District. ISBN:-
2. Shoemaker, Thomas M. and James E. Mack (2012). *The Lineman's and Cableman's Handbook* (12<sup>th</sup>/e). New York McGraw-Hill. ISBN: 978007174580

## Course Requirements and Instructional Methods

The course grade is based on total points accumulated during the semester. There is a maximum of 455 points. Course will be taught virtually. Meeting notices will be posted on student portal at the beginning of each week. Assignments are designed to elicit your demonstration of critical thinking, understanding and application of the course concepts, and your proficiency in the subject matter.

Teaching Methods: During this class you will have opportunity to participate in a variety of presentation and teaching methods. Lectures, including material not covered in your readings, class and group discussions requiring your active participation, student oral presentations, field trips will supplement your required readings.

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. Out of class assignments for this course includes reading assignments, study time for exams/quizzes, and completion of required course assignments. Students should actively read the assignment prior to class, bring any questions to class, and take careful notes during class.

Final grades are calculated as follows:

## Course Grading Based on Course Objectives

- 90-100% = A
- 80-89% = B
- 70-79% = C
- 60-69% = D
- Below 60% = F

### Required Activities or Assignments

- |                       |          |
|-----------------------|----------|
| 1. Midterm (1)        | 100 each |
| 2. Exam (1)           | 200 each |
| 3. Homework (15)      | 5 each   |
| 4. Participation (16) | 5 each   |

Total of 455 pts. Total accumulated points are divided by 455 to arrive at percentage score.

## Academic Honesty

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 IID policy and procedures 4530 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.

## Attendance

- 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

- 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.

### Online Etiquette

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

### Student Rights and Responsibilities

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](#).

### IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visitor click the heart icon in Canvas.

### Anticipated Class Schedule/Calendar

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Week 1 February 16, 2021	Syllabus & Introduction Service Connectors	Chapter Questions Due February 22, 2021
Week 2 February 23, 2021	Making Service Connections Overhead Residential Service Installation	Chapter Questions Due March 1, 2021
Week 3 March 2, 2021	Underground Residential Service Installation Backfeed, Short, and Jumper Tests	Chapter Questions Due March 8, 2021
Week 4 March 9, 2021	Three-Phase Service Installation Three-Phase Service Replacement	Chapter Questions Due March 15, 2021
Week 5 March 16, 2021	Operating Principles Wave Pattern Identification	Chapter Questions Due March 22, 2021
Week 6 March 23, 2021	Controls and Instrumentation Testing a Section of Cable	Chapter Questions Due March 29, 2021
Week 7 March 30, 2021	Compressor Operating Principles	Chapter Questions Due April 12, 2021



<b>Date or Week</b>	<b>Activity, Assignment, and/or Topic</b>	<b>Pages/ Due Dates/Tests</b>
<b>Week 8 April 6, 2021</b>	<b>Spring Recess – No School</b>	
Week 9 April 13, 2021	Cooling System and Major Compressor Parts Compressor Operation	Chapter Questions Due April 19, 2021
Week 10 April 20, 2021	Midterm	Chapter Questions Due April 26, 2021
Week 11 April 27, 2021	Pneumatic Jack Hammers and Tamps	Chapter Questions Due May 3, 2021
Week 12 May 4, 2021	Pneumatic Pumps	Chapter Questions Due May 10, 2021
Week 13 May 11, 2021	Pneumatic Saws and Duct Blowing Rigs	Chapter Questions Due May 17, 2021
Week 14 May 18, 2021	Job Hazards Protective Equipment	Chapter Questions Due May 24, 2021
Week 15 May 25, 2021	Safe Work Practices Overhead Line Maintenance	Chapter Questions Due May 31, 2021
Week 16 June 1, 2021	Underground Line Maintenance Substation and Switchyard Maintenance	Chapter Questions Due June 7, 2021
Week 17 June 8, 2021	<b>FINAL EXAM</b>	

**\*\*\*Subject to change without prior notice\*\*\***