

APLN 107-Power Lineman VII (IID Electrical System)

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| Instructor | Timothy E. Hutchinson | Phone | Office (760) 339-9376 Cellular (760) 427-1419 (24/7) |
| Office | Valley Plaza | E-mail | tehutchinson@iid.com |
| Office Hours | 0600-1530 hours | Class: | 1500-1900 hours: Wednesday's P-5 Training Trailer |

Text:

APEL 107 Electrical Line person VII

Description:

This is a Lineman Apprentice class. During this course outline fundamentals, operational values and Trouble-shooting methods will be discussed through literature, lecture and under direct Supervision including but not limited to hand's on training will be discussed during field trips visits to IID facility locations.

Goals:

Goal #1: Through discussion and lecture functions, controls and fundamentals will be given. Goal #1 will allow Senior Apprentice to apply basic skill and understanding of installations and services for overhead and underground electrical utility work.

Goal #2: Through hands on application discussions, basic understanding of work process/procedures, safety rules and state regulations our second goal is to have field competent level understanding of an IID electrical utility system service.

Goal #3: Through completion of this course, the Apprentice will have the basic understanding on how to conduct safe approach distances, basic work methods and the understanding of the function and fundamentals of an IID electrical utility service system.

Requirements:

Participation, hands on exercises by use of classroom study of service installations, three phase components through video or field visit within an IID electrical utility system (under direct Supervision by Instructor). Some class models/schematics will be issued to student for completion and student will have to display knowledge of function and fundamentals of an electrical circuit and discussion of loop feeds, switching methods, etc.

Resources:

Use of field visits to Switching Station(s), Substation Maintenance Shop, Engineering Staff and speakers (Field Engineers, C&M Substation Electricians) and training modules within text APEL 107.

Evaluation:

Class evaluation, testing for retention value (approximately every two to three weeks) will be given. The tests will be utilized for critique and concept review. Point values will not be accounted for.

Course Schedule:

Attachment is weekly schedule and all items are subject to change varying on availability of guest speakers and field visits.

Week/Topic

August 22, 2012

Service Installation:

Chapters 1-3

August 29, 2012

Service Installations:

Chapters 4-7

September 5, 2012

Compressors and Pneumatic tools:

Chapters 1-3

September 12, 2012

Compressors and Pneumatic tools:

Chapters 4-6

September 19, 2012

System Protection and Monitoring:

Chapters 1-3

September 26, 2012

System Protection and Monitoring:

Chapters 4-6

October 3, 2012

Transmission Line Safety:

Chapters 1-3

October 10, 2012

“Mid-term”

Tree Trimming:

Chapters 1-3

October 17, 2012

Tree Trimming:

Chapters 4&5

October 24, 2012

URD Troubleshooting:

Chapters 1&2

October 31, 2012

URD Troubleshooting:

Chapters 1&2

November 7, 2012

Multiple Street Lighting Systems:

Chapters 1-3

November 14, 2012

Multiple Street Lighting Systems:

Chapters 4-6

November 27, 2012

Series Street Lighting Systems:

Chapters 1&2

November 28, 2012

Series Street Lighting Systems:

Chapters 3&4

December 5, 2012

“Final Exam”

Series Street Lighting Systems:

Chapters 5&6

Examinations:

Quiz' is set for every two to three intervals, Midterm set for Week 8 and Final set for Week 16.

Grade(s): Grading system

Class participation is set at **25%** total grade. Completion of assignments 100 total points.

Home assignments are set at **25%** total grade. Completion of assignments 100 total points.

Mid-term is set at **25%** total grade. Fifty questions gathered from assignments, valued at two points each for a total of 100 points.

Final exam set at **25%** total grade. Fifty questions gathered from assignments and Mid-term exam at two points each total of 100 points.

Adding all four portions of the grading system and dividing by four would equal average points (0-100)

Point score-Letter grade

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|----------|------------------------------|
| 90-100 | A-Excellent |
| 80-89 | B-Better than Average |
| 70-79 | C-Average |
| 60-69 | D-Below Average |
| Below 60 | F-Failing |