

Course Title ELLT 103

Electrical Trades III

COURSE SYLLABUS

I. Course Description

A basic introduction to utility distribution systems including transformers, vaults, cables and safe work practices located in utility distribution systems.

II. Course objectives

- Understand safe work practices in Underground systems as defined in Cal/OSHA and G.O. Standards.
- Recognize hazardous materials and understand how to utilize MSDS sheets.
- Demonstrate basic knowledge of URD distribution systems
- Basic knowledge of URD and overhead transformers
- Demonstrate safe confined space work procedures
- Understand the need Rescue procedures in utility industry

III. Student learning outcomes:

Upon course completion, the student will have acquired new skills and knowledge by being able to:

1. Understand utility rules, standards and safe work practices.
2. Describe equipment and material used in distribution systems.
3. Understand the function of overhead and URD transformers.
4. Understand and acquire a basic understanding of MSDS sheets and confined space work methods.
5. Understand primary voltage connections and components of a distribution system.

IV. Text books required

ELLT 103

Transformation for line workers

V. Course Prerequisites

ELLT 102

VI. Grading

Quizzes	15%
Home work	15%
Essay presentation	20%
Mid-term exam	25%
Final Exam	25%
	100%

Grading Scale (%)	
90-100	A
80 - 89	B
70 - 79	C
60 - 69	D
0 - 59	F

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VII. Late work Policy

Homework and Essays turned in late will be assessed a penalty of a letter grade.

VIII. Drop policy

Students must drop themselves from class. Students will not be dropped due to absences.

IX. Important Dates

September 1st – drop without “W” and no fees

November 10th – dropping with “W” AND owing fees

X. Basis for Final Grade

- A You have done excellent work for all aspects of the class
- B You have done very good work overall
- C You have performed satisfactory work overall
- D You work is fair but not as strong as expected to pass on
- F You failed to do enough work to pass the class

XI. Cheating Policy

Students are expected to uphold the school’s standard of conduct relating to academic honesty. Students assume full responsibility for the content and integrity of the work they submit. A students submitted work, examinations and essays shall be that of the students own work.

XII. Contacting you instructor:

If you have any questions or concerns about the course, please contact me right away.

Instructor: David Shelton
Phone: 760-427-8590 or 760-960-2301
E-Mail: dgshelton@iid.com

Term: Fall 2012
Class Meeting Time: 4:00pm
Class Location: IID P-4 Trailer

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COURSE SYLLABUS

ELLT 103 ELECTRICAL TRADES III

(AGENDA SUBJECT TO CHANGE)

Wk 1 (8/21/12) Introduction:

Pass out and review course syllabus

Pass out text books

Discuss Emergency Evacuation Plan

Give Basic Knowledge Exam

Video Electrical Safety

Review Text books

Wk 2 (8/28/12) Discussion:

Quiz: None

Video

Field trip to Transformer shop (depending on weather)

Text book ELLT 103 Pad mounts transformers and Switch Gear pgs-1.1 thru 2-14

HOME WORK: Pad mounts transformers and Switch Gear read 1.1 thru 2-14 answer questions 1-14 and 2-15

Text Book Transformation for Line workers read Chapter 1 and complete self test questions

Wk 3 (9/4/12)

Discussion:

Quiz:

Video

HOME WORK: Pad mounts transformers and Switch Gear read 3.1 thru 4-7 answer questions 3-16 thru 3-17 and 4-7

Text Book Transformation for Line workers read Chapter 2 and complete self test questions

Wk 4 (9/11/12)

Discussion:

Quiz

Video

HOME WORK: : Pad mounts transformers and Switch Gear read 5-1 thru 6-21 answer questions 5-13, 6-20 and 6-21

Text Book Transformation for Line workers read Chapter 3 and complete self test questions

Wk 5 (9/18/12)

Discussion:

Safety Presentation

Video

Quiz

HOME WORK: Safety in underground line maintenance read 1-1 thru 1-13 answer questions 1-12 and 1-13

Text Book Transformation for Line workers read Chapter 4 and complete self test questions

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Wk 6 (9/25/12)

Discussion

Quiz

Video

HOME WORK: Safety in underground line maintenance read 2-1 thru 2-11 answer questions 2-13

Text Book Transformation for Line workers read Chapter 5 and complete self test questions

Wk 7 (10/2/12)

Discussion:

Quiz

Essay presentations

Review for Mid-term

HOME WORK: Prepare for mid-term

Wk 8 (10/9/12) MID TERM

HOME WORK: Safety in underground line maintenance read 3-1 thru 3-14 answer questions 3-13 and 3-14

Text Book Transformation for Line workers read Chapter 6 and complete self test questions

Wk 9 (10/16/12)

Discussion:

Quiz

Video

Confined Space

HOME WORK: Safety in underground line maintenance read 4-1 thru 4-13 answer questions 4-12 and 4-13

Text Book Transformation for Line workers read Chapter 7 and complete self test questions

Wk 10 (10/23/12)

Discussion:

Quiz

ITX air monitor hands on

Video

HOME WORK: Safety in underground line maintenance read 5-1 thru 5-22 answer questions 5-22

Text Book Transformation for Line workers read Chapter 8 and complete self test questions

Wk 11 (10/30/12)

Discussion:

Quiz

Arc Flash Safety

Video

HOME WORK: Safety in underground line maintenance read 6-1 thru 6-6 answer questions 6-6

Text Book Transformation for Line workers read Chapter 9 and complete self test questions

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Wk 12 (11/6/12)

Discussion:

Quiz

Emergency Rescue Procedures

Respirators

Video

HOMEWORK: Cable Splicing Unit 1 read 1.1-1 thru 1.3-9 answer questions 1.3-9

Text Book Transformation for Line workers read Chapter 10 and complete self test questions

Wk 13 (11/13/12)

Discussion:

Quiz

Grounding

HOME WORK: Cable Splicing Unit 1 read 1.4-1 thru 1.5-13 answer questions 1.5-13

Text Book Transformation for Line workers read Chapter 11 and complete self test questions

Wk 14 (11/20/12)

Discussion:

Quiz

Essay Presentations

HOME WORK None

Wk 15 (11/27/12)

Discussion:

Prepare for Final Exam

HOME WORK: None

Wk 16 (12/4/12) FINAL EXAM