HVLP 2643 ADVANCE DISTRIBUTION SYSTEMS- CRN - 60246
A study of high voltage and the distribution electrical field. High voltage equipment, tools, distribution equipment and safety procedures are covered. Local rules & regulations, as well as the electrical codes are covered as they pertain to these two (2) types of installations. Students work with various types of material and equipment.

Course Purpose: To prepare students for line work scenarios and prepare for capstone and their upcoming internships.

Type of Course: (Theory/Lab)

Credit Hours: 3; Total clock hours of theory per semester: 30;
Total clock hours of lab per semester: 45;

Class Length: 2 half

Class Days and Times: MTWRF 1:00pm – 3:05

Prerequisites: HVLP 2553, HVLP 2563, and completed two (2) H.V. Internships.

Instructor Name: Pete Salter
Instructor Phone: (405) 567-9258
Instructor Email: psalter@okstate.edu

Office: Bldg. 600 Room #2

Contact: My preferred method of contact is Email. Please allow 24-48 hours to return your correspondence during the normal work week.

Instructor's Office Hours: 12:00pm – 1:00pm

School Name: Engineering & Construction Technologies
School Main Phone: 918-293-4742

Required Text, References, and Materials


Materials: Materials needed including notebooks, writing utensils, project supplies, data storage devices, tools, etc.

Uniform/Tools: Lineman Hand Tools, boots, climbing equipment, hard hat, long sleeve shirt and safety glasses, every day in class

Estimated Cost for Materials: $30.00
Estimated Cost for Uniform/Tools: $0.00 bought in prior semester

Optional Resources: N/A
Upon completion of the course, students should:

<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Assessment of Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate Calculations using Ohms Law*</td>
<td>Reinforcement and Mastered: Assessment Test*</td>
</tr>
<tr>
<td>Calculate KWH/KVA/FLC*</td>
<td>Reinforcement and Mastered: Assessment Test*</td>
</tr>
<tr>
<td>Prepare different structures on ground and in the air.</td>
<td>Reinforcement: Observation Assessment</td>
</tr>
<tr>
<td>Perform all industry grounding methods</td>
<td>Reinforcement: Observation Assessment</td>
</tr>
<tr>
<td>Explain how to install and connect 1 phase and 3 phase; Transformers in a class room setting</td>
<td>Reinforcement: Assessment Test</td>
</tr>
</tbody>
</table>

Aspects of the course objective assessments may be used in the university’s assessment of student learning. If applicable, an asterisk (*) above indicates this assignment is used in the university assessment program.

Course Activities
In this course students will:

- Participate in class discussions and activities.
- View videos that depict the various concepts.
- Contribute to a course Service Learning project.
- Participate in group and individual presentations.
- Compile a portfolio of work produced.
- Take examinations.
- Complete reading assignments.
- May be required to do quizzes.

Evaluation - Grades will be based on the quality and completion of these tasks:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance and Participation</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Unit Exams</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td></td>
<td>30%</td>
</tr>
<tr>
<td>Transformer Calculation Exams</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Projects Essays and Reports</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

OSUIT Grading Scale

- A = 90%-100%
- B = 80%-89%
- C = 70%-79%
- D = 60%-69%
- F = 59% & below
*The student’s grade for this assignment will be used in the university’s assessment of student learning. A 70% competency or higher receives a Pass rating. This Pass/Fail rating is independent of the student’s course grade.

Daily and/or weekly quizzes, small weekly assignments and similar type projects: Normal return time to student by next class meeting or no later than one (1) week.

Extensive assignments, large lab projects, extensive quizzes, exams and similar type projects: Normal return time to students in one (1) to two (2) weeks.

**Recommended Student Competencies/Skills**
Pole climbing skills will be used.

**Authorized Tools**
Students may use any/all course materials, including books and notes, while participating in classroom activities. All quizzes and written assignments are to be completed independently; no collaboration with classmates is permitted and any instance of such will be considered academic dishonesty.

**Late Work**
No late work is accepted, unless excused absence defined under definitions listed in this syllabus. Excused absences will require proof as listed under definitions in this syllabus. Be sure to always contact instructor as soon as possible for any missed class time. Any student desiring to make up any class time or testing will be determined under the discretion of the instructor and may include pole climbing assignments designed by the instructor.

**Testing**
Daily, weekly, or surprise quizzes, Extensive quizzes, Extensive assignments, Exams and similar type projects are due at time of testing. NO MAKEUP of any type testing will be given except for excused absences identified under definition listed in this syllabus. Excused testing will be made up as soon as possible coordinated by the student and instructor. All students must complete all quizzes throughout the class course to qualify to take the final.

**Other Lab and Classroom Policies**
**Proper attire:** proper attire will be worn to safety class. Work pants (NO SHORT PANTS OF ANY TYPE!), T-Shirt or long sleeve shirt (NO SLEEVE LESS SHIRT EVER!), Long sleeve shirt will be worn while climbing, Work boots. Hats will be removed during class. Climbing tools/equipment, hand tools, hard hats, safety glasses, leather gloves, and boots.

**Pay particular attention to #12 #13 on the following list.** Thank you! HVLP Instructors, OSUIT. #1…No cursing at all! Inside or outside #2…Long sleeve shirt when climbing and in bucket truck #3…Hard hat, safety glasses, work gloves at all times #4…Rubber gloves, sleeves and lanyard when in the bucket #5…Rubber gloves and fall restraint when climbing #6…Check and inspect all poles before climbing and working out bucket truck #7…Work boots and pants, in class and outside #8…No call, text or e-mail in if you are going to be late or not coming to class.
#9…At least a pair of Klein’s, channel locks or crescent on your person at all times when doing outside labs  
#10…When vehicles are being backed, a person or persons will be backing the driver at all times  
#11…No tobacco, drugs or alcohol  
#12…No Pole Yard activities allowed (no pole climbing) from 7:30 am to 7:30 am the following day, unless OSUIT High Voltage Lineman Faculty is onsite and has given permission for that activity, which would be for that one time & that date.  
#13…Students must be 100% tied off to the pole 100% of the time.

**Syllabus Attachment**

View the Syllabus Attachment, which contains other important information, by visiting https://osuit.edu/center/files/19-20-syllabus-attachment.pdf

<table>
<thead>
<tr>
<th>Course Outline Schedule</th>
<th>Topic</th>
<th>Assignment</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-W-R-F/Week 1</td>
<td>Syllabus Transformer connections</td>
<td>Class expectations, assessments, and Transformer refresh, and review Unit test.</td>
<td>11-1-19</td>
</tr>
<tr>
<td>M-T-W-R-F/Week 2</td>
<td>Calculations FLC KVA</td>
<td>Projects &amp; Essays, weekly test review, outside lab, Calculation assessment, Unit test</td>
<td>11-8-19</td>
</tr>
<tr>
<td>M-T-W-R-F/Week 3</td>
<td>Building structures on ground and In the air Projects &amp; Essays</td>
<td>Projects &amp; Essays, weekly test review, outside lab, transformer, Unit test</td>
<td>11-15-19</td>
</tr>
<tr>
<td>M-T-W-R-F/Week 5</td>
<td>Three phase construction and building transformer banks.</td>
<td>Unit test review, outside lab, transformer assessment test</td>
<td>11-22-19</td>
</tr>
<tr>
<td>M-T-W-R-F/Week 6</td>
<td>Industry grounding Transformer theory</td>
<td>Unit weekly test review, outside lab, transformer, test</td>
<td>11-29-19</td>
</tr>
<tr>
<td>M-T-W-R-F/Week 7</td>
<td>Overall review of class topics Projects &amp; Essays</td>
<td>Projects &amp; Essays, weekly test review, outside lab, transformer, test Review, transformer test, Final written test</td>
<td>12-6-19</td>
</tr>
</tbody>
</table>

Schedule is subject to change at instructor discretion.