

ELT 201

The instructor reserves the right to change the calendar with notification

Date	Topic	Description	Location	Points	Learning outcomes
Week 1					
Tue. Aug 19	Introduction to ELT 201. Pretest. Begin learning basic knots.	Introduction Into the class and the trade. Outline of what students can expect to learn, and what they can expect to encounter in the trade. Overview of history of linework. Discussion board assignment.	Room 164		Increase understanding of the trade, and begin to identify the different categories of line work. (1, 2,)
Thurs. Aug 21	Intro to climbing. Continue with knots.	Assigned reading 49105-11 intro to climbing. Have students answer questions in the review section. Let students examine climbing gear, and show them how to inspect and perform preventative maintenance on said gear.	Room 164		Groundwork is laid for students to be able to inspect their own gear, and familiarize them with climbing gear, and how it's assembled. (1, 2, 3, 4)
Week 2					
Tue. Aug 26	Intro to climbing.	Go over review questions. Give quiz from book. Measure students for climbing gear. Discuss the variations, and pro's and con's of different gear. Discuss safety precautions. Discussion board assignment.	Room 164		Students are provided with knowledge about the fit and performance of climbing gear. Climbing safety is reinforced. (2, 3, 4)
Thurs. Aug 28	Power Line worker safety	Test on intro to climbing. Assigned reading 49102-11 1.0.0 through 4.5.0. Answer review questions 1-15. Give presentation on lineman safety, and consequences of ignoring safety rules.	Room 164	100	Instill the importance of safety. Give examples of safety failures to reinforce the importance of respecting safety rules. (1, 2, 3, 4, 5, 6)
Week 3					
Tue. Sep. 2	Power line worker safety	Go over review questions 1-15. Assigned reading 49102-11 5.0.0 through 11.3.0. Finish review questions. Assign quiz from book. Give presentation on confined entry. Discussion board assignment.	Room 164		Students learn the dangers associated with trenching, confined entry, and directional boring. Introduce basics of traffic control, job safety analysis, and task safety analysis. Introduce basics of worksite safety. (2, 6)
Thurs. Sep. 4	Power line worker safety, introduction to electrical circuits.	Go over review questions and quiz. Test on Power line worker safety. Intro to pole climbing, and knots. Assigned reading 49103-11. Answer review questions. Give presentation on Introduction to electrical circuits.	Room 164	100	Students learn the basics of electricity, ohms law. Lays groundwork for understanding of electrical theory. (1, 2, 5)
Week 4					
Tue. Sep. 9	Introduction to electrical circuits.	Go over review questions. Perform Ohm's law equations. Introduce class to digital meter, and explain functions. Review schematic symbols, series circuits, parallel, and combination circuits. Touch on resistor band meanings. Assign quiz on introduction to electrical circuits. Discussion board assignment.	Room 164		Reinforce Ohm's law, and deepen knowledge of electrical theory. Further familiarize students with electrical units, and their relationship with each other. Expose students to testing equipment. Increase understanding of the different types of circuits.
Thurs. Sep. 11	Introduction to electrical circuits. Aerial framing and associated hardware.	Test on introduction to electrical circuits. Assigned reading 49108-11. Answer review questions. Introduce students to various hardware used in line construction.	Room 164	100	Lay groundwork for students understanding of hardware associated with line construction, what the various hardware looks like, and how it functions. (2, 7)
Week 5					
Tue. Sep. 16	Aerial framing and associated hardware.	Go over review questions. Discuss and illustrate the different methods and phases of line construction including framing, sagging, guying, and mounting assorted hardware. Assigning quiz in book. Discussion board assignment.	Room 164		Students begin to learn the progression of line construction, and the different framing and construction methods. (2, 3, 4, 6)
Thurs. Sep 18	Aerial framing and associated hardware. Setting and pulling poles.	Test on aerial framing and associated hardware. Assigned reading 49111-11. Answer review questions. Give presentation on the dangers of handling poles, and how to properly set and remove poles. Explain proper safety procedures.	Room 164	100	Students will learn where they can and can't be while handling poles. Students will learn how to properly load, unload, dig, set, pull, and plumb utility poles. (1, 2, 5)
Week 6					
Tue. Sep. 23	Setting and pulling poles.	Go over review questions. Present students with different scenarios, and have them come up with different plans to set and remove poles under different circumstances. Assign quiz in book. Discussion board assignment.	Room 164		Students will learn the different techniques for setting poles, and be able to identify hazards associated with setting and removing poles, and learn how to overcome those hazards. (1, 2, 6)
Thurs. Sep. 25	Setting and pulling poles. Underground residential distribution systems.	Test on Setting and pulling poles. Assigned reading 80204-11, answer review questions. Give presentation on URD systems, and discuss the pro's and con's compared to overhead systems.	Room 164	100	Students are given an understanding of the components of an underground system, and presented with the hazards of working with those systems. (2, 5, 7)

Week 7				
Tue. Sep. 30	Underground residential distribution systems.	Go over review questions. Present students with scenarios involving underground systems. Discuss the similarities and differences of overhead and underground systems. Discuss the hardware, and various connections of underground systems. Review the different techniques for installing URD systems. Assign quiz in book. Discussion board assignment.	Room 164	Students become familiar with underground systems, and their components. Students begin to comprehend the basics of installing, and trouble shooting URD systems. (1, 2, 5, 7)
Thurs. Oct. 2	Underground residential distribution systems. Climbing other than wood.	Test on URD systems. Assigned reading 49106-11, and do review questions. Presentation on climbing steel towers and structures, fall arrest. Go over fall arrest inspection. Discuss environmental concerns, and inspection guide lines.	Room 164	100 Students learn the importance of maintaining fall arrest equipment, and proper use. Students learn to properly fit fall protection, and proper anchor points. Students learn to plan climbs adjusting for environmental conditions, and equipment conditions. (1, 2, 4)
Week 8				
Tue. Oct. 7	Climbing other than wood.	Go over review questions. Discuss the different kinds of lanyards, and their application, and operation. Allow class to lead discussion about fall protection with emphasis on safety and importance of proper use. Assign quiz in book. Discussion board assignment.	Room 164	Students learn the importance of use of fall protection, and the consequences of misuse. (2)
Thurs. Oct. 9	Climbing other than wood.	Test on unit. Review of ELT 201 book. Preparation for quiz on entire book.	Room 164	100 Students review ELT 201 book, and prepare to be tested on it's contents. Students reexamine the different facets of line construction and maintenance. (1, 2, 3, 4, 5, 6, 7)
Week 9				
Tue. Oct. 14	ELT 201	Test on ELT 201 book. Mid term exam.	Room 164	200 Students prove their knowledge of linework, and are evaluated to determine where more instruction is needed. (1, 2, 3, 4, 5, 6, 7)
Thurs. Oct. 16	Grounding	Learning when, and how to ground de-energized conductor. Use of "shotgun" stick. Use of equipotential grounds. Discussion board assignment.	Room 164	Students learn how, and when to safely test and apply protective grounding devices. (2, 4, 5, 6)
Week 10				
Tue. Oct. 21	Framing on the ground.	Students learn how to frame poles on the ground before they are set. Special precautions for setting framed poles, and setting poles near energized lines. Knots review.	Room 164	Students learn safe procedures for setting framed poles, and setting poles near energized lines. Students learn the different kinds of framing for different pole types. (2, 5, 6)
Thurs. Oct 23	Guying	Guy attachments, johnny balls, fiberglass fish, guy preforms, guy rods, anchors, and tensioning guy wires. Test on ground framing, setting framed poles, setting poles near energized lines, knots. Discussion board assignment.	Room 164	100 Students are taught how to construct guy wires, and attach them to anchor rods and poles, the various insulators that are used in their construction, and bonding to ground. (1, 2, 5)
Week 11				
Tue. Oct 28	Puller	Setting up, and operating the puller. Hazards associated with pulling rope.	Room 164	Students learn how to set up the puller, and how to prepare to pull in wire. (1, 2, 5)
Thurs. Oct. 30	Tensioner	Setting up and operating the tensioner. Hazards associated with pulling in wire, and safety precautions around tensioner and puller when in operation. Travelling grounds. Discussion board assignment.	Room 164	100 Students learn how to operate the tensioner, how to set it up, how to load wire, and safety precautions while pulling in wire. (2)
Week 12				
Tue. Nov. 4	Overview-Framing on ground, Guying, Puller, and tensioner.	Review ground framing, guying, puller operation, and tension operation. Review safety precautions. Quiz.	Room 164	Students prepare to pull wire. Students review the steps of preparing to pull, and safety measures. (2)
Thurs. Nov. 6	Dead ending, and sagging wire.	Test on hardware, knots, pulling, and safety. Dead ending, and sagging wire. Discussion board assignment.	Room 164	100 Students learn to dead end wire, and bring it to the correct tension, or "sag". Students learn different methods of sagging. (1, 2)
Week 13				
Tue. Nov. 11	<i>Thank you Veterans!</i>		Room 164	
Thurs. Nov. 13	Field trip. Discussion board assignment.		Room 164	Students gain real world knowledge of substations, and real world power line design and construction. (1, 2, 5)
Week 14				
Tue. Nov. 18	Hurt man rescue.	Review hurt man rescue procedures and techniques. Go over clipping in, angle poles, associated hardware.	Room 164	Students learn how to retrieve and injured man from different apparatus, and the safety procedures to follow in case of emergency. (1, 2, 3, 4)
Thurs. Nov. 20	Putting it all together.	Test on line construction, hardware. Discussion board assignment.	Room 164	100 Students are assessed on course content. Preparations begin for final exam. (2, 5, 6)
Week 15				

Tue. Nov. 25	Review of ELT 201..	Practice test. Review of course content. Go over terms. Review safety. Student directed discussion.	Room 164		Students prepare for exit exam. (1, 2, 3, 4, 5, 6, 7)
Thurs. Nov 27	<u>Happy Thanksgiving!</u>		Room 164		
Week 16					
Tue. Dec. 2	Final exam.	Final exam	Room 164	300	Final assesment. (1, 2, 3, 4, 5, 6, 7)
Thurs. Dec. 4	Semester Review/Make up exams.	Semester review. Make up exams if necessary.	Room 164		Review all information from semester. Make up final exams if necessary. (1, 2, 3, 4, 5, 6, 7)