4/14/2023 DATE
☑ REQUIRED COURSE
☑ ELECTIVE COURSE

Technology DIVISION
☐ NEW COURSE
☑ REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	EET-069		**TITLE:** *(30 Characters Max)*		Residential and Light Commerical Wiring						
SEM CR HRS:	3	**Lecture:**	2		**Lab:**	2				**ECH:**	4
Course Level:	☐ Gen Ed / IAI ☐ Baccalaureate /Non-IAI ☑ Career/Technical ☐ Dev Ed/ Not in Degree Audit			**Clinical Practicum:**	0	**SOE/ Internship:**	0	**SOE ECH:**	0		
COURSE PCS #	12.460302		**IAI Code**					**Contact Hours (Minutes Per Week)**			
Repeatable (Y/N):	Y	**Pass/Fail (Y/N):**	N	**Variable Credit (Y/N):**	N	**Min:**		**Max:**		**16 Wks**	200	**8 wks**	400
Prerequisites:	None										
Catalog Description: (40 Word Limit)	This course provides students with an understanding of residential wiring. Topics include safety, planning, and installation of residential wiring systems according to the National Electrical Code®.										

	List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Non-Clinical Internship/ SOE
1	Wiring Fundamentals	4			
2	Installation	12	14		
3	Planning	4	4		
4	Specialized Installations	10	12		
5					
	TOTAL	30	30	0	0

EVALUATION							
QUIZZES	☑	**EXAMS**	☑	**ORAL PRES**	☐	**PAPERS**	☐
LAB WORK	☑	**PROJECTS**	☐	**COMP FINAL**	☑	**OTHER**	☐

COURSE MATERIALS	
TITLE:	Modern Residential Wiring
AUTHOR:	Harvey N. Holzman
PUBLISHER:	Goodheart - Wilcox
VOLUME/EDITION/URL:	8th
COPYRIGHT DATE:	2008

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		The student will be able to:
Wiring Fundamentals	4	Explain basic workplace safety rules. Describe and explain series and parallel circuits. Discuss proper tool use and care.
Installation	26	Describe major components of a service panel. Describe connection requirements of a service panel. Demonstrate proper grounding methods. Determine the gauge of a wire using a micrometer. Strip insulation from wires using a stripping tool Describe the choices of conduit. Identify the proper electrical box. Identify the location of electrical boxes.
Planning	8	Identify recommended requirements to follow before beginning work on a circuit. Identify who indicates outlet locations on house plans. Explain steps needed prior to installing electrical devices. Formulate the minimum number of switched circuits in a house.
Specialized Installations	22	Explain NEC regulations for special applications. Design a power distribution system for special applications. Compute loads for special applications.
Insert New Line Above this Line		
	60	

COURSE OUTCOMES*	At the successful completion of this course, students will be able to:

• Determine load, wire size and protection devices for circuit design according to NEC.
• Demonstrate proper wiring methods for residential applications using NEC standards.
• Determine material list for residential electrical job.

** Course Outcomes will be used in the Assessment Software for Outcomes Assessment. Limit to 3 - 5.*