



MASTER COURSE OUTLINE

A. ELEC 2710 House Wiring Project I (Rough-in)

B. COURSE DESCRIPTION:

This course covers the rough-in wiring of an actual house. Topics and activities include layout, National Electrical Code (NEC) requirements, installation of boxes, boring holes, installation of wires and low voltage cabling, main and temporary service installation.

Prerequisites: ELEC 1707, ELEC 1715, and ELEC 1723.

(.5 Cr – 0 lect, .5 lab)

C. *Core Theme: Critical Thinking

D. RIVERLAND INSTITUTIONAL LEARNING OUTCOMES:

This course addresses the following Riverland Institutional Learning Outcome(s):

- ILO 1: critical thinking (*Core Theme Goal 2*)
- ILO 2: awareness of the larger global community (*Core Theme Goal 7 or 8*)
- ILO 3: ethical, engaged citizenship (*Core Theme Goal 9 or Goal 10*)
- ILO 4: communication and collaboration (*Discipline Goal 1 and by any learning outcome(s) involving communication or collaboration*)

E. MAJOR CONTENT AREAS:

- Safety on the job sites
- National Electrical Code (NEC) requirements
- Layout and blueprint reading
- Installation of boxes
- Installation of wires and cabling
- Power tools, drills, and saws
- State of Minnesota Electrical Inspection

F. GOAL TYPES, OBJECTIVES, AND OUTCOMES:

<u>GOAL</u>	<u>OBJECTIVES</u> Students will be able to	<u>OUTCOMES</u> The student will successfully
* <u>Critical Thinking</u>	analyze the logical connections among the facts, goals, and implicit assumptions relevant to a problem or claim; generate and evaluate implications that follow from	1. apply didactic knowledge to worksite project.

	them.	
<u>CS</u>	follow safety rules.	1. demonstrate and follow safety rules.
<u>CS</u>	read blueprints and lay out all electric in the house as per NEC.	1. demonstrate proper layout as per NEC requirements.
<u>CS</u>	bore holes, mount boxes, and install wires and cabling.	1. demonstrate proper use of tools and installation of correct wires and cabling methods.
<u>CS</u>	pass state electrical rough-in inspection.	1. pass the inspection or make necessary corrections to pass inspection.

G. SPECIAL INFORMATION:

This course may require use of the Internet, the submission of electronically prepared documents and the use of a course management software program. Students who have a disability and need accommodations should contact Accessibility Services at the beginning of the semester. This information will be made available in alternative format, such as Braille, large print, or current media, upon request. Students will have to commute to Austin for this course and bring their own hand tools.

H. COURSE CODING INFORMATION:

Course Code S/Class Maximum 28; Letter Grade

Revision date: 04/15/10; 04/02/24

AASC Approval date: 04/19/11; 05/07/24

*These five MnTC Goals have been identified as Riverland Community College Core Themes. Every course in the Riverland Community College curriculum shall meet outcomes from one of these themes.

**These five MnTC Goals have been identified as Riverland Community College Disciplines. Riverland's MnTC courses also shall meet outcomes from a Discipline Area.

NOTE: The Minnesota Transfer Curriculum "10 Goal Areas of Emphasis" are reflected in the five required discipline areas and five core themes noted in the Riverland Community College program of study guide and/or college catalog.

*Riverland Community College Core Themes	MnTC Goal Number
Critical Thinking (CT)	2
Human Diversity (HD)	7
Global Perspective (GP)	8
Ethical and Civic Responsibility (EC)	9
People and the Environment (PE)	10

**Riverland Community College Discipline Areas	MnTC Goal Number
Communication (CM)	1
Natural Sciences (NS)	3
Mathematics/Logical Reasoning (MA)	4
History and the Social & Behavioral Sciences (SS)	5
Humanities and Fine Arts (HU)	6

Riverland