Wayne County Community College District

COURSE SYLLABUS

LRT 202   Reading and Interpreting Railroad Diagrams

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:
This course provides an overall understanding of how to read and interpret electrical diagrams commonly used in the rail industry. The course will include a review and discussion of the following topics: Ladder Diagrams, Contactors, Motor Starters, Motors, Programmable Logic Controller, and other related railroad electrical symbols.

**PREREQUISITES*: LRT 102, EE 101, EE 102*

EXPECTED COMPETENCIES:
Upon successful completion of the course, the student will be able to:
   • Read and navigate utilizing topographic map
   • Read and navigate utilizing standard railroad right of way maps.
   • Develop a rail incident report utilizing information from both topo and right-of-way maps.
   • Confirm and report the location of various physical structures found on railroad property.
   • Understand the operational theory of the Global Positioning System
   • Understand how the various components of PTC are combined to prevent train on train incidents.
   • Recognize the various communications and signal symbols.
   • Understand how communication and signal systems are integrated into railroad operations

ASSESSMENT METHODS:
Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:
90%-100% = A
80%-89.9%= B
70%-79.9%= C
60%-69.9%= D
<60% = E