Miami Dade College

Course Description
TRA1410 | Introduction to Rail Freight Operations | 3.00 Credits

This is an introductory course in Rail Freight Operations. Students will learn the advantages and disadvantages of freight movement by rail, how rail lines are organized and operate, including the use of intermodal transfer facilities and on-dock rail. Topics include shipping documents, shipment tracking, management of human resources and equipment, and an overview of hazardous materials shipments and security issues. Co-requisites: TRA1420, 1430.

Course Competencies:

Competency 1: The student will demonstrate basic knowledge of the breadth and scope of a rail system by:
1. Identifying the significant railroads in Florida and the services they provide
2. Describing railroad systems and performance
3. Demonstrating the ability to read, write, and conduct a conversation using commonly used terms in the railroad industry
4. Identifying the railroads' role in the intermodal shipping of goods (piggyback, etc.)
5. Describing the organizational structure of a railroad company and its operations

Competency 2: The student will describe the roles of the federal government and its various agencies in the railroad industry by:
1. Explaining the role of government in regulating safety, operations, and interstate commerce
2. Identifying the types of rail cargo moved by rail and the types of documentation required
3. Identifying the types of hazardous materials moved by rail and the rules governing this type of shipment

Competency 3: The student will demonstrate knowledge of performance and quality measurements in a rail System by:
1. Developing and tracking performance measures
2. Analyzing system performance Developing contingency plans

Learning Outcomes:
• Solve problems using critical and creative thinking and scientific reasoning.
• Communicate effectively using listening, speaking, reading, and writing skills.
• Use computer and emerging technologies effectively.