

# Minnesota State College Southeast

## ABCT 1115: Introduction to Transportation Careers

### A. COURSE DESCRIPTION

Credits: 1

Lecture Hours/Week: 1

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Intro to Transportation Careers covers departmental procedures and practices as well expectations of the students in the programs. Safety, environmental concerns, and simulated Right to Know training are a significant part of the course. Basic tools, tool usage, basic power tools, and care of them are included. Threaded fasteners, drive types, torquing, thread compounds, cutting methods, gluing, and adhesives are covered from a generic point and not vehicle specific. (Prerequisites: none) (1 credits: 1 lecture/0 lab)

**B. COURSE EFFECTIVE DATES:** 02/10/2015 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Departmental procedures, practices, and expectations
2. Safety, environmental, and shop practices for transportation programs
3. Fasteners, cutting methods, attachment methods, and related tools
4. Transportation terminology related to the industry and vehicles

#### **D. LEARNING OUTCOMES (General)**

1. Identify departmental policies and document awareness of them
2. Identify hand tools and proper usage
3. Secure required tools for transportation program enrolled in
4. Participate in "Employee Right To Know" simulation
5. Demonstrate knowledge of MSDS or SDS information
6. Demonstrate knowledge of proper usage and selection of personal safety equipment
7. Secure personal protection equipment for use in school lab/shop area
8. Explain environmental concerns and related regulations for the transportation maintenance service industry
9. Demonstrate knowledge of hazardous material disposal related to transportation vehicle service maintenance
10. Demonstrate knowledge of hazardous spill containment and clean-up related to transportation maintenance
11. Identify classifications of fire extinguishers and usage
12. Demonstrate knowledge of proper fire extinguisher usage
13. Define professionalism and related ethics
14. Identify fastener categories and usage
15. Identify fastener sizing, hardness, and drive type
16. Identify methods for removal of seized fasteners and broken fasteners
17. Explain fastener torquing procedures and use of thread compounds
18. Identify methods for cutting and drilling metals and plastics used on vehicles
19. Identify methods of cutting and repairing threads
20. Demonstrate knowledge of rivet and fastener usage to secure two or more layers of material
21. Examine categories and usage of various glues and adhesives
22. Exhibit knowledge of basic transportation vehicle terminology
23. Identify causes of corrosion and dissimilar material reactions
24. Demonstrate knowledge of power tool safety and usage
25. Demonstrate knowledge of lifting and carrying safety
26. Identify best practices for vehicle movement and customer vehicle care procedures
27. Demonstrate knowledge of proper housekeeping practices for shop areas
28. Participate in all class discussions and activities
29. Complete all required course assignments, quizzes, and tests

#### **E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

#### **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted