# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

## **SAULT STE. MARIE, ONTARIO**



## **COURSE OUTLINE**

COURSE TITLE: Trade Practices & Auxiliary Systems

CODE NO.: TCT 801 SEMESTER: 8 week

block

**PROGRAM:** Apprenticeship: Truck & Coach Technician

**AUTHOR:** John Avery

DATE: Jan. 2009 PREVIOUS OUTLINE DATED:

**APPROVED:** 

"Corey Meunier"
CHAIR

DATE

**TOTAL CREDITS**: 5

PREREQUISITE(S): Apprenticeship

**HOURS/WEEK:** 

Copyright ©2008 The Sault College of Applied Arts & Technology

Reproduction of this document by any means, in whole or in part, without prior written permission of Sault College of Applied Arts & Technology is prohibited. For additional information, please contact Corey Meunier, Chair School of Technology & Skilled Trades

(705) 759-2554, Ext. 2610

#### I. COURSE DESCRIPTION:

Trade practices, is designed to provide the theory and practical training to enable the student to describe the Regulatory Requirements of the Highway Traffic Act and how it applies to employers and employees involved in Repair Service and operation of On Highway Commercial Vehicles. The course content deals with the safe operating conditions that apply to the mechanical components on commercial vehicles and equipment falling under both the Federal and Canadian Motor Vehicle Standards Acts. Students will learn the provisions and the meaning of FMVSS and the CMVSA limits and Standards for Out Of Service Criteria inspections for On Highway Commercial Vehicles and Towing Equipment. Course content will also cover newer electronic systems involving Collision Warning Equipment and Lane Guidance Systems. Students will be taught about the Heating, Ventilation and Air Conditioning Systems used in On Highway Truck and Coach Vehicles. The Students will learn the theory and practical knowledge to test and repair the various types of components both mechanical and electrical that are involved in the operation of the HVAC System including the impact of the Environmental Laws and effects regarding the proper use and disposal for the refrigerants used in the HVAC Systems.

#### II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

- 1. Define the fundamentals of safe practices in the workplace.
- 2. Define the responsibilities of employers and employees relating to safe work practices and protection of the environment.
- 3. Perform the proper inspection, testing, and repair procedures for these Systems.
- 4. Define the purpose, construction and fundamental operation of the components used to operate these systems.
- 5. Outline the application and maintenance procedures of the CMVSA, FMVSS Act and the HVAC Systems according to Manufacturer procedures and specifications.

#### III. TOPICS:

- 1. Regulatory Requirements of the Trucking Industry
- 2. Highway Traffic Act
- 3. Vehicle Inspection Crieteria
- 4. Collision Warning Devices
- 5. Heating, Ventilation, and Air conditioning Systems
- 6. Proper testing, maintenance and safe handling and repair procedures of the Air Conditioning Refrigerant

## IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Hand outs provided by instructor as well as text books requested by department as per booklist.

#### V. EVALUATION PROCESS/GRADING SYSTEM:

Students will be tested on the material covered per apprenticeship curriculum by multiple choice questions, assignments, and practical tests. The weigh factor for each area of testing will be as follows

Theory Tests	50 %
Practical Tests	30 %
Assignments	20 %

This evaluation can change depending on the emphasis placed on each of the above testing procedures.

The following semester grades will be assigned to students:

Definition	Grade Point Equivalent
90 – 100% 80 – 89%	4.00
70 - 79%	3.00
60 - 69%	2.00
50 – 59%	1.00
49% and below	0.00
	90 – 100% 80 – 89% 70 - 79% 60 - 69% 50 – 59%

CR (Credit) Credit for diploma requirements has been awarded.

S Satisfactory achievement in field /clinical

placement or non-graded subject area.

U Unsatisfactory achievement in

field/clinical placement or non-graded

subject area.

X A temporary grade limited to situations

with extenuating circumstances giving a student additional time to complete the

requirements for a course.

NR Grade not reported to Registrar's office.
W Student has withdrawn from the course

without academic penalty.

#### VI. SPECIAL NOTES:

## **Disability Services:**

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

### Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

#### Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

#### Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct*. Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

## Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

#### VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.