SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Trade Practices and Auxiliary Systems

CODE NO.: TCT711 APP Level: TWO

PROGRAM: Truck and Coach Technician – Level 2

AUTHOR: George Parsons/John Avery

DATE: August **PREVIOUS OUT Line DATED:** May

2016

2016

APPROVED: "Corey Meunier"

CHAIR

TOTAL CREDITS: 4

PREREQUISITE(S): Commercial Vehicle Common

HOURS/WEEK: Total hours 21

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I. COURSE DESCRIPTION:

Upon successful completion of this course the apprentice will be able to use manufacturers' service literature, personal computers and networks to locate service and parts information and understand networking protocols of OEM Intranet data hubs, repair vehicle cab components and fixtures to the manufacturers' and statutory standards, to describe the different types of truck and coach rig configuration used in highway applications and access information to determine legal vehicles by weight, height and length. Students will also be taught to perform tasks involving the shielded metal arc process of TIG Welding and MIG Welding Methods and the associated theory and safe handling working procedures that are required by industry standards.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Information Accessing and Communication Systems Potential Elements of the Performance:

- Define the purpose, functions and application of Information Accessing and Communications Systems.
- Create letters and reports using a PC (personal computer) and universal software programs.
- Describe how spreadsheet and word processing software is used in service facilities and how to manage information.
- Introduction to networking.
- Describe the theoretical process of MIG Welding and TIG Welding systems.
- Perform both TIG and MIG Welding tasks to the Instructors standards of satisfactory acceptance.

2. Cabs and Control Systems

Potential Elements of the Performance:

- Describe the functions, construction and application for Cabs and Control Systems.
- Perform inspecting and testing and adjustment procedures for Cabs and Control Systems.
- Inspect clean and service door seals window seals and dash mould components.
- Determine the proper axle weight ratio for various types and material of cargo loads.

3. Truck Trailer and Articulating Coach Combinations Potential Elements of the Performance:

- Define the purpose and fundamentals of truck rig configurations and articulating coaches.
- Describe the functions, types, styles and application of tractortrailer configurations and articulating coaches.
- Explain the principles.

4. Electric Arc, MIG and TIG Welding

Potential Elements of the Performance:

- Describe the fundamentals and differences of Arc, Mig and Tig Welding Procedures.
- Perform examples of Arc, Mig and Tig Welding in the Flat, Vertical and Overhead positions.
- Explain the differences in the Welding Procedures.

III. TOPICS:

- 1. Information Accessing and Communication Systems.
- 2. Cabs and Control Systems.
- 3. Truck, Trailer and Articulating Coach Combinations
- 4. Electric Arc. Mig and Tig Welding

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Fundamentals of Medium/Heavy Duty Commercial Vehicle Systems
Jones & Bartlett Learning CDX Automotive – ISBN: 978-1-284-04116-3

Sault College and SAE approved safety glasses and steel toe work boots required for shop activities, including coveralls.

Pens, Pencils, Calculator and 3 Ring Binder

V. EVALUATION PROCESS/GRADING SYSTEM:

- 70% theory testing
- 10% shop assignments
- 20% practical tests

Please Note:

Students must take part in shop practical testing to receive credit for their work.

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	Grade Point Equivalent
A+	90 – 100%	4.00
A B	80 – 89% 70 - 79%	3.00
С	70 - 79% 60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been	
S	awarded. Satisfactory achievement in field /clinical	
U	placement or non-graded subject area. 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.	
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If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

Trade Practices & Auxiliary Systems

VI. SPECIAL NOTES:

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

It is the departmental policy that once the classroom door has been closed, the learning process has begun. Late arrivers will only be granted admission to the room at the Instructors discretion.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located in D2L and on the portal form part of this course outline.



COURSE OUTLINE ADDENDUM

1. Course Outline Amendments:

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

2. 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.

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3. 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. Please refer to the Student Key Dates Calendar for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio. Student Services can provide information regarding the Prior Learning Assessment and Recognition policy or it can be viewed on the student portal.

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

4. Student Portal:

The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information timetable, grades, records of achievement, unofficial transcript, and outstanding obligations. In addition announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more is available. Go to https://my.saultcollege.ca.

5. Communication:

The College considers **Desire2Learn (D2L)** 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 this Learning Management System (LMS) communication tool.

6. Accessibility 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 the Accessibility Services office. Call Ext. 2703 or email studentsupport@saultcollege.ca so that support services can be arranged for you.

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7. Audio and Video Recording Devices in the Classroom:

Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. Students with disabilities who require audio or visual recording devices in the classroom as an accommodation will receive approval from their counsellor once the Audio and Video Recording Devices in the Classroom Policy has been reviewed by the student. Recorded classroom instruction will be used only for individual academic use and will not be used for any other purpose. Recordings may only be used for individual study of materials presented during class and may not be published or distributed. Intentional misuse of audio and video recordings or intentional misrepresentation when requesting the use of a device for recording shall constitute a violation of this policy and laws protecting intellectual property.

8. <u>Academic Dishonesty</u>:

Students should refer to the definition of "academic dishonesty" in the *Student Code of Conduct*. Students who engage in academic dishonesty will be issued a sanction under the Student Code of Conduct which could lead to and include expulsion from the course/program. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, students must use a documentation format for referencing source material.

9. <u>Tuition Default:</u>

Students who have defaulted on the payment of tuition) as of the first week of November (fall semester courses), first week of March (winter semester courses) or first week of June (summer semester courses) will be removed from placement and clinical activities due to liability issues. This may result in loss of mandatory hours or incomplete course work. Sault College will not be responsible for incomplete hours or outcomes that are not achieved or any other academic requirement not met as of the result of tuition default. Students are encouraged to communicate with Financial Services with regard to the status of their tuition prior to this deadline to ensure that their financial status does not interfere with academic progress.