



**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 tractor-trailer 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:**

Text Book: Heavy Duty Truck Systems  
4<sup>th</sup> or 5<sup>th</sup> ed., 12959# Edition  
Author: Bennett  
Publisher: Thomson Nelson Learning Canada

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:

<b>Grade</b>	<b>Definition</b>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
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.	

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.

**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.