SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: SHOP MANAGEMENT

CODE NO. : ASR100 **SEMESTER:** 1

PROGRAM: AIRCRAFT STRUCTURAL REPAIR TECHNICIAN

AUTHOR: PAUL DAVIS

DATE: September 2015 **PREVIOUS OUTLINE DATED:** September 2014

APPROVED: "Colin Kirkwood"

DEAN

TOTAL CREDITS: 2

PREREQUISITE(S): N/A

HOURS (Total): 32

For additional information, please contact Colin Kirkwood, Dean,
School of the Environment, Technology & Business
705-759-2554, Ext. 2688

I. COURSE DESCRIPTION:

This course introduces and explains the proper techniques used in personal shop safety, various hand and power machinery and regulations governing shop operation procedures. An introduction to various types of paperwork associated with aircraft manufacturing and overall as per Transport Canada regulations pertaining to A.M.O.'s. Fire extinguisher types and their usage will be presented and discussed. Basic WHMIS and Human Factors in aviation will be discussed.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1) Identify and discuss shop requirements.

Potential Elements of the Performance:

- define and discuss approved maintenance organizations
- discuss the legal requirements as set forth by Transport Canada to operate an A.M.O.
- identify the management personnel requirements and their responsibilities in an A.M.O.
- describe stores personnel responsibilities in an A.M.O.
- discuss various departments in a stores department and their respective functions
- discuss the other departments in an A.M.O.
- discuss the paperwork involved in stores in accepting, rejecting and movement of parts

2) Discuss and demonstrate safely, the operations of various power machinery and hand tool operations.

Potential Elements of the Performance:

- define the safety aspects associated with shop safety
- discuss hand tool operation procedures and safe handling
- identify various shop machinery and operate machinery safely
- define the importance of personal safety and identify the requirements of using safety lasses, safety boots, etc. where appropriate
- discuss the safety rules that govern a sheet metal shop
- identify hazards in the sheetmetal shops
- identify personnel in charge of shop safety in an A.M.O.

3) List and describe the paperwork requirements found in the maintenance, manufacturing and overhaul of aircraft.

Potential Elements of the Performance:

- identify the paperwork associated with aircraft repair and overhaul
- describe the importance of Maintenance Release Tags
- identify all forms used in aircraft maintenance and their importance
- describe how tracking of serviceable and unserviceable items is accomplished by Records Department in an A.M.O.
- discuss both the Technical Logbook and its sections and the Journey Logbooks and their importance

4) Identify the various types of fire extinguishers and their proper application.

Potential Elements of the Performance:

- identify the four most commonly used fire extinguishers found in aircraft facilities
- describe the classes of fire extinguishers as to where its type would be used
- discuss how to use a basic hand held fire extinguisher

5) Understand basic WHMIS regulations and understand an employee responsibility as WHMIS pertains to the workplace.

Potential Elements of the Performance:

- understanding what WHMIS stands for
- understanding hazardous materials
- government, industry and labour requirements
- identification of hazardous materials and symbols
- MSDS data sheet requirements

6) FOD - Understand the possible damage that will occur to aircraft due to foreign object damage and discuss methods to eliminate F.O.D.

Potential Elements of the Performance:

- identify types of foreign material that will cause damage to an aircraft
- discuss methods of preventing damage
- describe the effects of F.O.D. to aircraft fuselages and systems

7) Human Factors in Aviation- Understand the 12 major factors that attribute to poor aircraft maintenance, incidents and accidents. Discuss the safety nets to use to eliminate these 12 factors.

III. TOPICS:

1. Shop Management
2. Personal Shop Safety
3. Fire Extinguishers
4. Foreign Object Damage
5. WHMIS
6. Human Factors

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Handouts
Aviation Maintenance Technician Handbook FAA-H-8083-30

V. EVALUATION PROCESS/GRADING SYSTEM

Two multiple-choice tests – each test is worth 50% of the final mark.

Note: Students in the Aircraft Structural Repair Program require a minimum of seventy (70) percent in a course to obtain a passing grade. This equates to a "B" grade.

Grade	Definition	Grade Point Equivalent
A+	90 - 100%	4.00
A	80 - 89%	4.00
B	70 – 79%	3.00
C	60 – 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% or 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.

Course attendance is mandatory. If a student is absent, he/she must have a valid reason – documentation is required.

Students having missed more than 5 percent of the program through absences, shall not qualify for experience credit from Transport Canada, and will not be granted make-up or re-write options for theory tests and shop projects.

If a student is absent for all of the in-class theory or shop demonstrations for which a test/project is assigned, he/she will not be granted permission to complete the test/project.

It is the departmental policy that once the classroom door has been closed, the learning process has begun. Late arrivers will not be granted admission to the room.

VII. COURSE OUTLINE ADDENDUM:

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