SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

Sault College

COURSE OUTLINE

COURSE TITLE: SHOP MANAGEMENT

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

PROGRAM: AIRCRAFT STRUCTURAL REPAIR

AUTHOR: STEVE LACHOWSKY

DATE: SEPT. 09   **PREVIOUS OUTLINE DATED:** JAN. 09

APPROVED: "B. Punch"

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                                       Chair   **DATE**

TOTAL CREDITS: 2

PREREQUISITE(S): N/A

HOURS (Total): 32

Shop Management   ASR100

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.

II.   LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE (Continued)

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

Shop Management   ASR100

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 supplied by teacher

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.	

VI.   SPECIAL NOTES:

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.

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.

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 Academic Calendar of Events 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.

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

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.

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.

Shop Management   ASR100

Plagiarism:
Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct*. A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may (i) issue a verbal reprimand, (ii) make an assignment of a lower grade with explanation, (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade "C", (iv) make an automatic assignment of a failing grade, (v) recommend to the Chair dismissal from the course with the assignment of a failing grade. 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.

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 to announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more. Go to https://my.saultcollege.ca.

Electronic 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. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.

Shop Management   ASR100

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 enclosed,
the learning process has begun. Late arrivers will not be granted
admission to the room.*

COURSE NOTE: **All assignments must be completed. Failure to complete
assignments will result in removal of 10% from the test associated with the
assignment.**