



# COURSE OUTLINE

## ASR100

Prepared: Paul Davis    Approved:

<b>Course Code: Title</b>	ASR100: SHOP MANAGEMENT
<b>Program Number: Name</b>	4067: AIRCRAFT STRUCT TECH
<b>Department:</b>	AIRCRAFT STRUCTURAL REPAIR
<b>Semester/Term:</b>	17F
<b>Course Description:</b>	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.
<b>Total Credits:</b>	2
<b>Hours/Week:</b>	2
<b>Total Hours:</b>	32
<b>Vocational Learning Outcomes (VLO's):</b>	<p>#1. Safely use the tools, equipment and identify materials needed to carry out various sheet metal repairs.</p> <p>#5. Organize work safely, economically and efficiently.</p> <p>#14. Apply Department of Transport regulations to paperwork and authorization licences to release aircraft back to service.</p>
<small>Please refer to program web page for a complete listing of program outcomes where applicable.</small>	
<b>Essential Employability Skills (EES):</b>	<p>#1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</p> <p>#2. Respond to written, spoken, or visual messages in a manner that ensures effective communication.</p> <p>#4. Apply a systematic approach to solve problems.</p> <p>#5. Use a variety of thinking skills to anticipate and solve problems.</p> <p>#6. Locate, select, organize, and document information using appropriate technology and information systems.</p> <p>#9. Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</p> <p>#10. Manage the use of time and other resources to complete projects.</p> <p>#11. Take responsibility for ones own actions, decisions, and consequences.</p>
<b>Course Evaluation:</b>	Passing Grade: 70%. B



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**Other Course Evaluation & Assessment Requirements:**

Grade  
Definition Grade Point Equivalent  
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.

**Evaluation Process and Grading System:**

Evaluation Type	Evaluation Weight
Test #1	50%
Test #2	50%

**Course Outcomes and Learning Objectives:**

### Course Outcome 1.

Identify and discuss shop requirements.

### Learning Objectives 1.

- 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

### Course Outcome 2.



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

### **Learning Objectives 2.**

- 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 glasses, 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.

### **Course Outcome 3.**

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

### **Learning Objectives 3.**

- 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

### **Course Outcome 4.**

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

### **Learning Objectives 4.**



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- 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

### **Course Outcome 5.**

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

### **Learning Objectives 5.**

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

### **Course Outcome 6.**

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

### **Learning Objectives 6.**

- 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

### **Course Outcome 7.**

Human Factors - 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.

### **Learning Objectives 7.**



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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.

**Date:**

Friday, September 1, 2017

Please refer to the course outline addendum on the Learning Management System for further information.