SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE MARIE, ON

COURSE OUTLINE

Course Title: BLUEPRINT READING I & II

Code No.: ASR1010 Semester: 1

Program: AIRCRAFT STRUCTURAL REPAIR

Author: STEVE LACHOWSKY

Date: June 2002 Previous Outline Date: Nov. 2000

Approved: _____ _____
Dean Date

Total Credits: 4
Prerequisite(s):
Length of Course: 4 Hrs./Wk. Total Credit Hours: 72

BLUEPRINT READING I & II ASR1010

COURSE NAME COURSE NUMBER

I. COURSE DESCRIPTION:

Students will be assigned blueprint reading assignments. Using textbooks and in-class instruction, students will develop the skills to read aircraft blueprint drawings. Aircraft blueprints will be examined and assignments will be submitted by students in the form of an in-class presentation and discussion.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

(Generic Skills Learning Outcomes placement on the course outline will be determined and communicated at a later date.)

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

1) Research and discuss blueprint terminology, line identification symbols, various tolerances and proper maintenance of drawings.

Potential Elements of the Performance:

- research and discuss blueprint terminology, line identification symbols, various tolerances and proper maintenance of drawings
- define the various terms used in blueprint reading
- identify the various types of lines and symbols used in blueprints
- discuss the importance of Title Blocks, Bill of Materials, and Revision Blocks
- discuss the various types of tolerances such as minus, positive and total tolerance
- discuss the importance of proper care of blueprints and correct filing of blueprints after being used

2) Extract specific information found in drawings such as components, part numbers, station location of components, quantity of parts, aircraft approvals and revisions.

Potential Elements of the Performance:

- identify components found on aircraft blueprints
- identify using the title block the number of components used to assemble the antenna
- identify part numbers associated with the installation
- describe the location of the antenna installation
- discuss any revisions associated with this blueprint
- identify using the Title Block, the personnel responsible for this blueprint
- identify the type of blueprint
- identify which aircraft this blueprint is associated and approved for

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

3) Discuss and complete textbook assignments #1 and #2 associated with blueprint types, blueprint abbreviations, scales and symbols. Assignments #1 and #2 must be completed prior to classroom presentation.

Potential Elements of the Performance:

- identify the three most commonly used blueprints found in aircraft structural repair
- describe the information a blueprint must have to be understandable
- discuss orthographic projection drawings
- describe the various views associated with orthographic projection
- identify material symbols
- discuss various abbreviations used in blueprint reading
- discuss blueprint scales and baseline dimensioning
- describe internal and external thread dimensioning associated with blueprint reading
- complete assignments #1 to #25 found in the student textbook titled “Basic Blueprint Reading and Sketching”

III. TOPICS:

1) Blueprint Identification and Terminology

2) Blueprint structural components identification and requirements

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

A/C65-9A
Basic Blueprint Reading & Sketching (5th Edition)
Teacher Handouts

V. EVALUATION PROCESS/GRADING SYSTEM

Test (1) Part 'A' - Multiple Choice - Part 'B' - Aircraft Drawings
GRADING:

A+ (94-100)	B (78-85)	
A (86-93)	C (70-77)	R Repeat

VI. SPECIAL NOTES:

- Special Needs
  If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, learning disabilities), you are encouraged to discuss required accommodations with the instructor and/or contact the Special Needs Office, Room E1204, Ext. 493, 717, 491 so that support services can be arranged for you.

- 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 post-secondary institutions.

- Disclaimer for Meeting the Needs of the Learners

- Substitute Course Information is available at the Registrar's Office.

- Course Note: Assignments not complete as per instructor guide lines will automatically reduce the final grade by 10%

VII. PRIOR LEARNING ASSESSMENT

Students who wish to apply for advanced credit in the course should consult the instructor.