SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: BLUEPRINT READING I & II

CODE NO.: ASR101 SEMESTER: 1

PROGRAM: AIRCRAFT STRUCTURAL REPAIR

AUTHOR: STEVE LACHOWSKY

DATE: Sept. 09 PREVIOUS OUTLINE DATED: Jan. 09

APPROVED: "B. Punch" Sept '09

Chair DATE

TOTAL CREDITS: 4

PREREQUISITE(S): n/a

HOURS (Total): 64

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For additional information, please contact Brian Punch, Chair School of The Natural Environment, Technology & Skilled Trades

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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:

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
- 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

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.

The following semester grades will be assigned to students:

Definition	Grade Point Equivalent
90 – 100% 80 – 89%	4.00
70 - 79%	3.00
60 - 69%	2.00
50 – 59%	1.00
49% and below	0.00
Credit for diploma requirements has been awarded.	
Satisfactory achievement in field /clinical placement or non-graded subject area.	
	90 – 100% 80 – 89% 70 - 79% 60 - 69% 50 – 59% 49% and below Credit for diploma requirements has been awarded. Satisfactory achievement in field /clinical

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.

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.

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.