

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: NON-DESTRUCTIVE TESTING

CODE NO. : ASR110 **SEMESTER:** 2

PROGRAM: AIRCRAFT STRUCTURAL REPAIR

AUTHOR: PAUL DAVIS

DATE: SEPT.2010 **PREVIOUS OUTLINE DATED:** SEPT. 2010

APPROVED: "B.Punch" **Dec.'10**

CHAIR **DATE**

TOTAL CREDITS: 2

PREREQUISITE(S):

HOURS (Total): 32

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*For additional information, please contact Brian Punch, Chair
Natural Environment/Outdoor Studies & Technology Programs*

(705) 759-2554, Ext. 2681

COURSE DESCRIPTION:

- I. Extensive research will be accomplished to identify the types of N.D.T. method in use in the aircraft industry. The advantages, disadvantages and procedures used to perform N.D.T. will be discussed. Emphasis on Dye Penetrate, Magnuflux, Visual and Radiographic procedures will be addressed. Various test equipment will be discussed associated with each type of N.D.T. method. Presentations will be administered in class and laboratories.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Identify the common types of NDT methods used in the aviation industry, describe how each method is performed, discuss the advantages and disadvantages of selecting specific methods and understand the personal safety requirements.

Potential Elements of the Performance:

- identify the various types of N.D.T. methods used in aircraft inspection
- describe the procedures used to perform basic N.D.T. methods
- select the proper type of N.D.T. method to be used
- discuss the advantages and disadvantages of one method Vs other methods
- identify the various equipment associated with N.D.T. methods
- discuss the safety precautions associated with N.D.T. equipment

III. TOPICS:

1. N.D.T. Types
2. Equipment

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

A/C 65-9A Textbook
EA-AC-43-3 Textbook

V. EVALUATION PROCESS/GRADING SYSTEM:

One multiple-choice test worth 100% of 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.

The following semester grades will be assigned to students in postsecondary courses:

Grade	Definition	<i>Grade Point Equivalent</i>
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% 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.	

VI. SPECIAL NOTES:**Special Needs:**

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Special Needs office. Visit Room E1101 or call Extension 2703 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 postsecondary institutions.

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 Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. 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.

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.

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

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

VII. 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.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

