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



# **COURSE OUTLINE**

Course Title:	NON-DESTRUCTIVE TESTING		
Code No.:	ASR1100	Semester: 2	
Program:	AIRCRAFT STRUCTURAL REPAIR		
<u>Author</u> :	STEVE LACHOWSKY		
Date: Dec. 2002 <u>Previous Outline Date</u> : Dec. 2001			
Approved:	Dean	Date	
Total Credits: Prerequisite(s):	<b>2</b>		

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For additional information, please contact Kitty DeRosario, Dean, School of Trades
& Technology, (705) 759-2554, Ext. 642.

Length of Course: 2 Hrs./Wk. Total Credit Hours: 36

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#### I. COURSE DESCRIPTION:

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:

(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) 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

ASR1100

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## V. EVALUATION PROCESS/GRADING SYSTEM

One Written Test (1)

GRADING:

A+ - 94 - 100% A - 86 - 93% B - 78 - 85% C - 70 - 77% R - REPEAT

ASSIGNMENTS: See special notes

## 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.
- All assignments must be completed. Any assignments not completed will result in the

removal of 10% from the final grade in ASR110.

#### VII. PRIOR LEARNING ASSESSMENT

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