



COURSE OUTLINE

ASR110

Prepared: Paul Davis Approved:

Course Code: Title	ASR110: NON- DESTRUCTIVE TESTING
Program Number: Name	4067: AIRCRAFT STRUCT TECH
Department:	AIRCRAFT STRUCTURAL REPAIR
Semester/Term:	18W
Course Description:	The students will research and identify the types of non-destructive testing methods used by the aircraft industry. The advantages, disadvantages and procedures used to perform NDT will be discussed. Emphasis on Liquid Penetrant, Magnetic Particle Inspection, Visual, Eddy Current, Ultrasound, Infrared Thermography, Fire Inspection and Radiography inspection procedures will be addressed.
Total Credits:	2
Hours/Week:	2
Total Hours:	32
Vocational Learning Outcomes (VLO's):	<p>4067 - AIRCRAFT STRUCT TECH</p> <p>#2. Demonstrate a working knowledge of the principles of aircraft design by applying theory and shop practice.</p> <p>#5. Organize work safely, economically and efficiently.</p> <p>#11. With the use of manuals quickly locate and pinpoint station locations on fuselage construction and wing structures.</p> <p>#14. Apply Department of Transport regulations to paperwork and authorization licences to release aircraft back to service.</p> <p>#16. Demonstrate honesty and integrity to match the requirements of the aircraft industry.</p>
Essential Employability Skills (EES):	<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>#7. Analyze, evaluate, and apply relevant information from a variety of sources.</p> <p>#10. Manage the use of time and other resources to complete projects.</p>
Course Evaluation:	Passing Grade: 70%, B

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
Assignments	10%
Test #16A	45%
Test #16B	45%

Books and Required Resources:

Aviation Maintenance Technician Handbook
 ISBN: 978-1-56027-716-3

Course Outcomes and Learning Objectives:**Course Outcome 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

Learning Objectives 1.

- 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

Date:

Monday, December 18, 2017

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