



COURSE OUTLINE: ASR110 - NON-DESTRUCTIVE TESTING

Prepared: Paul Davis

Approved: Corey Meunier, Chair, Technology and Skilled Trades

Course Code: Title	ASR110: NON- DESTRUCTIVE TESTING
Program Number: Name	4067: AIRCRAFT STRUCT TECH
Department:	AIRCRAFT STRUCTURAL REPAIR
Semesters/Terms:	20W
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
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Vocational Learning Outcomes (VLO's) addressed in this course:	4067 - AIRCRAFT STRUCT TECH
Please refer to program web page for a complete listing of program outcomes where applicable.	VLO 2 Demonstrate a working knowledge of the principles of aircraft design by applying theory and shop practice.
	VLO 5 Organize work safely, economically and efficiently.
	VLO 11 With the use of manuals quickly locate and pinpoint station locations on fuselage construction and wing structures.
	VLO 14 Apply Department of Transport regulations to paperwork and authorization licences to release aircraft back to service.
	VLO 16 Demonstrate honesty and integrity to match the requirements of the aircraft industry.
Essential Employability Skills (EES) addressed in this course:	EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.
	EES 4 Apply a systematic approach to solve problems.
	EES 5 Use a variety of thinking skills to anticipate and solve problems.
	EES 6 Locate, select, organize, and document information using appropriate technology and information systems.
	EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.
	EES 10 Manage the use of time and other resources to complete projects.
Course Evaluation:	Passing Grade: 70%, B
Books and Required Resources:	Aviation Maintenance Technician Handbook ISBN: 978-1-56027-716-3



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Course Outcomes and Learning Objectives:	Course Outcome 1	Learning Objectives for Course Outcome 1
	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	1.1 identify the various types of N.D.T. methods used in aircraft inspection 1.2 describe the procedures used to perform basic N.D.T. methods 1.3 select the proper type of N.D.T. method to be used 1.4 discuss the advantages and disadvantages of one method Vs other methods 1.5 identify the various equipment associated with N.D.T. methods 1.6 discuss the safety precautions associated with N.D.T. equipment
Evaluation Process and Grading System:	Evaluation Type	Evaluation Weight
	Assignments	10%
	Test #16A	45%
	Test #16B	45%
Date:	August 29, 2019	
Addendum:	Please refer to the course outline addendum on the Learning Management System for further information.	