Prepared: Paul Davis Approved:

Course Code: Title	ASR101: BLUEPRINT READING
Program Number: Name	4067: AIRCRAFT STRUCT TECH
Department:	AIRCRAFT STRUCTURAL REPAIR
Course Description:	Using textbook assignments and in-class instructions, students will develop the skills to interpret, read and understand aircraft blueprints. Various aircraft company blueprints will be examined in group like sessions and presented by students. Terminology associated with these blueprints will also be researched and presented.
Total Credits:	4
Hours/Week:	4
Total Hours:	64
Vocational Learning Outcomes (VLO's):	#2. Demonstrate a working knowledge of the principles of aircraft design by applying theory and shop practice. #4. Read and follow blueprint, shop drawings and manufacturer`s manuals necessary in all manufacturing and overhaul facilities. #6. Carry out any repair according to specifications, stated job procedures and the requirements of the Department of Transport Regulations. #13. Fabricate sheet metal parts with the use of shop equipment and manuals.
Essential Employability Skills (EES):	#1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience. #4. Apply a systematic approach to solve problems. #5. Use a variety of thinking skills to anticipate and solve problems. #6. Locate, select, organize, and document information using appropriate technology and information systems. #7. Analyze, evaluate, and apply relevant information from a variety of sources. #9. Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals. #10. Manage the use of time and other resources to complete projects.

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	#11. Take responsibility for ones own actions, decisions, and consequences.
Course Evaluation:	Passing Grade: 70%, B
Other Course Evaluation & Assessment Requirements:	• Test 4A - Multiple Choice – worth 25% of final grade • Test 4B – Blueprints – worth 40% of final grade • Test 4C – Multiple choice – worth 25% of final grade • Assignments – Worth 10% of final grade 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:	Test #4A is 25% of the total grade Test #4B is 25% of the total grade Test #4C is 50% of the total grade
Books and Required Resources:	Aviation Maintenance Technician Handbook ISBN: 978-1-56027-716-3 Basic Blueprint Reading and Sketching ISBN: 9781483781
Course Outcomes and Learning Objectives:	**Course Outcome 1.**

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Research and discuss blueprint terminology, line identification symbols, various tolerances and proper maintenance of drawings.

Learning Objectives 1.

- 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

Course Outcome 2.

Extract specific information found in drawings such as components, part numbers, station location of components, quantity of parts, aircraft approvals and revisions.

Learning Objectives 2.

- 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

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Course Outcome 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.

Learning Objectives 3.

- 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”

Date:	Thursday, July 20, 2017