

University of Management and Technology**Course Outline**

Course code: ET 337L

Course title: Workshop Practices Lab

Program	BSc Aircraft Maintenance Engineering Technology
Credit Hours	01
Duration	16 weeks
Prerequisites	ET233L
Resource Person	Amman Mujahid
Contact	amman.mujahid@umt.edu.pk

Faculty Signature

Date.....

Chairman/Director signature.....

Dean's signature.....

Date.....

Learning Objective:

The course is aimed to impart the students with an in-depth understanding of safety and maintenance practices on aircraft and in workshops. The course introduces the safety and preventive workshop practices; use of hand and measurement tools and general test equipment; calibration of tools and calibration standards.

Upon successful completion of the course, the student should be able to:

CLO No	CLO Statement	PLO	Learning Domain and level
1	Define and analyze the concepts of aircraft maintenance.	1	C1
2	Execution of lab work using Ansys to study flow characteristics over aerofoil	5	P4
3	Analyze the outcomes of experiments through report	4	C4
4	Ability to assist and work as a team member for the multitask activities in lab	9	A2

1. CLO – PLO MAPPING:

CLOs	PLOs											
	En gin eer ing Te ch nol og y Kn ow led ge	Pro ble m An aly sis	De sig n / De vel op me nt of Sol uti on s	Inv esti gat ion	Mo der n To ol Us ag e	Th e En gin eer ing Te ch nol og ist and So ciet y	En viro nm ent and Su stai nab ility	Eth ics	Indi vid ual and Tea m Wo rk	Co mm uni cati on	Pro ject Ma na ge me nt	Life lon g Lea rnin g
	1	2	3	4	5	6	7	8	9	10	11	12
1	C1											
2					P4							
3				C4								
4									A2			

Learning Methodology:

- Workshop practice is also included to ensure student's acquaintance with procedures and tools used in aviation hardware technology
- Assessment criteria is based on Assignments, Lab tasks, and quizzes (***both announced and unannounced***) during the semester along with final assessments.

Recommended Text Books:

"Maintenance Practices, Cat B1, Module 7" by AeroBildung, 2014

Reference Books:

"Aviation Maintenance Technician Handbook" by U.S. Department of Transportation, Federal Aviation Administration, 2008.

Lab Handouts

Grade Evaluation Criteria

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

Practical:

Marks Evaluation	Marks Percentage
Term Project	20%
Lab Report	30%
Final Evaluation	50%
Total	100%

Calendar of Course contents to be covered during semester

SR No.	Experiment Title.	CLOs
1	Enlist and interpret the safety signs and safety equipment placed in the aircraft hangar and workshop	CLO1 CLO2 CLO3 CLO4
2	Identify the hand and power cutting and drilling tools available in the workshop and enlist their function	
3	Measure the torque in the nuts and screws using torque wrenches and log data	
4	Measure shaft eccentricity and wobbling using dial indicator and log data	
5	Make a rectangular tray using the given sheet metal and hand tools	
6	Make a connection to two lights controlled by one switch in series	
7	Make a connection to two lights controlled by one switch in parallel	
8	Make a connection to one light controlled by 2 two way switches	
9	Prepare a marked specimen (to prepare a T fit) to given dimensions using the measuring tools	
10	Prepare the specimen (T fit) using hand cutting tools as per given instructions	
11	Make rivets on a metal sheet using marking and riveting tools	
12	Measure failure strength and efficiency of revited joints under UTM.	

Class Policy

STUDENTS ARE REQUIRED TO READ AND UNDERSTAND ALL ITEMS OUTLINED IN THE PARTICIPANT HANDBOOK

CLASS ATTENDANCE: Students need to be in class at the assigned time. After 10 minutes past the assigned time, the students will be marked absent.

TURN OFF MOBILE PHONE! It is unprofessional to be texting or otherwise.

READ EMAILS! Participants should regularly check their university emails accounts regularly and respond accordingly. Students would be responsible if they miss a deadline because of not reading the emails.

CLASS ATTENDANCE POLICY: A minimum of 80% attendance is required for a participant to be eligible to sit in the final examination. Being sick and going to weddings is absence and will not be counted as present. Participants with less than 80% of attendance in a course will not be allowed to take end term exams. International students who will be leaving for visa during semester should not use any days off except for visa trip to avoid reaching short attendance.

MOODLE: UMT –LMS (Moodle) is an Open Source Course Management System (CMS), also known as a learning Management System (LMS). Participants should regularly visit the course website on MOODLE Course Management system, and fully benefit from its capabilities. In case of any problem while using MOODLE, visit <http://oit.umt.edu.pk/moodle>. For queries email moodle@umt.edu.pk

HARASSMENT POLICY: Sexual or any other harassment is prohibited and is constituted as punishable offence. Sexual or any other harassment of any participant will not be tolerated. All actions categorized as sexual or any other harassment when done physically or verbally would also be considered as sexual harassment when done using electronic media such as computers, mobiles, internet, emails etc.

USE OF UNFAIR MEANS/ HONESTY POLICY: Any participant found using unfair means or assisting another participant during a class test/quiz, assignments or examination would be liable to disciplinary action.

PLAGIARISM POLICY: All students are required to attach a “Turnitin” report on every assignment, big or small. Any student who attempts to bypass “Turnitin” will receive “F” grade which will count towards the CGPA. The participants submit the plagiarism report to the resource person with every assignment, report, project, thesis etc. If student attempts to cheat Turnitin, a second “F” will be awarded that will count towards the CGPA. There are special rules on plagiarism for final reports etc. all outlined in your handbook.

COURSE WITHDRAWAL POLICY: Students may withdraw from a course till the end of the 12th week of the semester. Consequently, grade ‘W’ will be awarded to the student which shall have no impact on the calculation of the GPA of the student. A Student withdrawing after the 12th week shall be automatically awarded “F” grade which shall count in the GPA.

COMMUNICATION OF RESULTS: The results of quizzes and assignments are communicated to the participants during the semester and answer books are returned. It is the responsibility of the course instructor to keep the participants informed about his/her progress during the semester. The course instructor will inform a participant at least one week before the final examination related to his or her performance in the course.