

University of Management and Technology

Course Outline

Course code: ET 343

Course title: Aircraft Assembly, Rigging and Ground Handling

Program	BSc Aircraft Maintenance Engineering Technology
Credit Hours	02
Duration	16 weeks
Prerequisites	Nil
Resource Person	Abdullah Ashfaq
Counseling Timing	Monday Wednesday Thursday 1400 hrs to 1530 hrs
Contact	----- ABDULLAHASHFAQ@UMT.EDU.PK -----

Chairman/Director signature.....

Dean's signature.....

Date.....

Learning Objective:

The course introduces the concepts of ground handling which includes all services an aircraft needs during the period it remains on the ground. These include operational areas, such as: ramp services; passenger services, cargo and mail services; load control; communication and flight operations services; representation and supervision services. Along with these students will be equipped with concepts based on aircraft assembly and rigging.

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

CLO No	CLO Statement	PLO	Learning Domain and level
1.	<i>Describe</i> the ground handling operations and aircraft assembly and rigging.	1	C2
2.	Have familiarisation and able to <i>explain</i> aircraft turnaround plan, aircraft loading/unloading, fuel and oil handling services, aircraft cleaning, servicing, and aircraft de/anti icing and associated environmental effects.	6	C2
3.	Plan and <i>Prepare</i> enhancements for increased performance of aircraft servicing and ground handling operations.	10	C3

1. CLO – PLO MAPPING:

CLOs	PLOs											
	Engineering Technology Knowledge	Problem Analysis	Design / Development of Solutions	Investigation	Modern Tool Usage	The Engineering Technologist and Society	Environment and Sustainability	Ethics	Individual and Team Work	Communication	Project Management	Lifelong Learning
	1	2	3	4	5	6	7	8	9	10	11	12
1	C2											
2						C2						
3										C3		

Learning Methodology:

- The teaching of the course will be via a series of lectures. This will be complemented by the use of textbook, and an extensive range of web resources plus handouts/articles and video clips.
- Participants should expect 5-6 class activities during the semester which will form the basis for evaluation (viva). 2 assignments, individual/group presentations and quizzes. These activities will be complemented with discussions and analysis to strengthen the learning.

Recommended Text Books:

Reference material will be provided.

Grade Evaluation Criteria

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

Theory:

Marks Evaluation	Marks in percentage
Quizzes (x6)	15%
Assignments (x2)	10%
Evaluation (Viva)	5%
Presentation	5%
Mid Term Examination	25%
End Term Examination	40%
Total	100 %

Calendar of Course contents to be covered during semester

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Week	Course Contents	Reference Chapter(s)	Quiz	Assignments	CLOs
1	Introduction to Aircraft Rigging and Assembly		1	1	1
2-3	Disassembly, Inspection, Repair and Assembly Techniques				
4-5	Aircraft Rigging Techniques <ul style="list-style-type: none"> • Airplane Assembly • Control Cables Operating Systems 		2	1	1,2
6	Aircraft Characteristics and Turnaround plan				
7	Catering and Cleaning Services				

8,9	Ground Service Equipment			1	2
10	Airside Safety				
Mid Term Exam					
11	Ramp security awareness		3	2	2,3
12	Aircraft Cleaning and De-icing/Anti-icing				
13	Aircraft Weight and Balance				
14-15	Aircraft Handling and Storage Fire Protection		4	2	1,3

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.

Faculty Signature

Date.....