

Module Title:	Human Factors
Language of Instruction:	English
Credits:	5
NFQ Level:	6
Module Delivered In	No Programmes
Teaching & Learning Strategies:	This module will be taught by Lectures, Tutorials, and discussion/analysis of published aircraft accident investigation reports.
Module Aim:	The student will understand that by recognising human factors issues in aircraft flight crew & maintenance engineering, it can help them to identify problems and prevent accidents. By analysing various case studies, the student will understand the 'human' side of aircraft accidents and incidents, specifically the social, physical, physiological and environmental aspects as they affect the flight crew, maintenance staff and management.

Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Describe how Human Factors issues affect performance of aviation tasks
LO2	Identify and share safety information effectively with others using a wide range of communication skills
LO3	Explain the various types of human error occurring within aviation and analyse their effect
LO4	Describe the types of common hazards in workplace and identify how to eliminate them

Pre-requisite learning
Module Recommendations <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>
No recommendations listed
Incompatible Modules <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>
No incompatible modules listed
Co-requisite Modules
No Co-requisite modules listed
Requirements <i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>
No requirements listed

Module Content & Assessment

Indicative Content
General The Need To Take Human Factors Into Account; Incidents Attributable To Human Factors/Human Error; 'Murphy's' Law.
Human Performance And Limitations Vision; Hearing; Information Processing; Attention And Perception; Memory; Claustrophobia And Physical Access.
Social Psychology Responsibility: Individual And Group; Motivation And De-Motivation; Peer Pressure; 'Culture' Issues; Team Working; Management, Supervision And Leadership.
Factors Affecting Performance Fitness/Health; Stress: Domestic And Work Related; Time Pressure And Deadlines; Workload: Overload And Underload; Sleep And Fatigue, Shiftwork; Alcohol, Medication, Drug Abuse.
Physical Environment Noise And Fumes; Illumination; Climate And Temperature; Motion And Vibration; Working Environment
Tasks Physical Work; Repetitive Tasks; Visual Inspection; Complex Systems
Communication Within And Between Teams; Work Logging And Recording; Keeping Up To Date, Currency; Dissemination Of Information
Human Error Error Models And Theories; Types Of Error In Maintenance Tasks; Implications Of Errors (I.E. Accidents) Avoiding And Managing Errors.
Hazards In The Workplace Recognising And Avoiding Hazards; Dealing With Emergencies.

Assessment Breakdown	%
Continuous Assessment	30.00%
End of Module Formal Examination	70.00%

Continuous Assessment				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Short Answer Questions	Each student will take Sketch/Drawing/Short Answer-format Continuous Assessment exams, administered during term time for which a maximum of 30% will be awarded	1,2,3,4	30.00	n/a

No Project

No Practical

End of Module Formal Examination				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	Each student will sit a formal written examination at the end of the module for which a maximum of 70% will be awarded.	1,2,3,4	70.00	End-of-Semester

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	Every Week	1.00
Tutorial	Every Week	1.00
Total Hours		2.00

