

Guidance to Instructors on Subject Delivery

AIRMANSHIP KNOWLEDGE

Programme of learning:

- This is a suggested programme for the delivery of this subject.
- The main headings are the Learning Outcomes (LO1, LO2, etc), with sub headings related to topics within those Learning Outcomes (see Glossary of Terms).

Activities:

- Some practical activities are suggested throughout the programme as a way of reinforcing the learning and adding interest.
- It may be not be practical to undertake all of these activities at the suggested part of the programme.
- Instructors may have to adapt this programme to prevailing circumstances.

Method of delivery:

- Learning resources can be found on Ultilearn and may be adapted by the instructor, if required.
- Lesson delivery should be as practical as possible and should contain the maximum amount of cadet participation and interaction.

Check of understanding:

- Each lesson should contain a check of understanding (see Glossary of Terms).
- At the start of each lesson, the previous check of understanding should be reviewed in order to consolidate previous learning before moving on to new learning.

Formative assessment:

- There should be a formative assessment at the conclusion of each Learning Outcome (see Glossary of Terms).

Summative assessment:

- This is the Online Assessment, through Ultilearn, of the Assessment Criteria for this subject (see Glossary of Terms).
- Assessment Criteria (see Glossary of Terms) are found on the final page of this document.

AIRMANSHIP KNOWLEDGE
Introduction: <ul style="list-style-type: none">• Introduction to the subject and assessment method
LO1: Know types of airfield operations used for the control of aircraft
Air traffic control: <ul style="list-style-type: none">• Introduce the components of an air traffic control system• Explain the roles and areas of responsibilities of aerodrome controllers• Explain the roles and areas of responsibilities of approach controllers• Explain the roles and areas of responsibilities of runway controllers• Explain the locations in or on airfields of these controllers• Explain how aircraft are managed around an airfield according to each air traffic control system
Communications: <ul style="list-style-type: none">• Introduce the communications used in airfield operations and air traffic control• Explain the main systems used by air traffic control• Explain special telephones• Explain tele-talk• Explain radio telephony• Explain the special roles of communications equipment within the air traffic control system• Explain the positive and negative points of each type of equipment
Aids: <ul style="list-style-type: none">• Introduce the aids used in airfield operations and air traffic control• Explain the signs and symbols used on an airfield• Explain the control of aircraft movements on the ground• Explain the air traffic control aids for aircraft in flight• Explain the use of surveillance radar• Explain the use of precision approach radar• Explain the use of instrumental landing systems
Activity 1: <ul style="list-style-type: none">• Cadets should view videos which relate to airfields and aircraft control
Activity 2: <ul style="list-style-type: none">• Cadets should go to an active airfield to visit the air traffic control tower and talk to the controllers. Cadets should also look for the visual aids used on an airfield

Review:

- Review the types of airfield operations used for the control of aircraft

Formative assessment:

- Formative assessment of the types of airfield operations used for the control of aircraft

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LO2: Know the Rules of the Air

Rules of the Air:

- Introduce the basic principles of the Rules of the Air
- Explain the main types of aircraft defined in the rules of the air, including:
 - Balloon
 - Glider
 - Airship
 - Powered aircraft
- Explain the reasons for the rules of the air
- Explain how to identify aircraft at night

Right of way:

- Introduce the right of way of aircraft
- Explain the rights of way for dissimilar aircraft types
- Explain the rights of way for each type of aircraft, when:
 - Aircraft overtaking
 - Approaching head on
 - Converging
 - Approaching to land
 - Landing in an emergency

Clock code:

- Introduce the clock code
- Explain how to describe the location of an aircraft in the air using the clock system
- Explain how to describe altitude, including:
 - High
 - Level
 - Low

Activity 1:

- Cadets should use themselves or aircraft models to simulate the practical use of the rules of the air

Review:

- Review the basic principles of the Rules of the Air

Formative assessment:

- Formative assessment of the basic principles of the Rules of the Air

AIRMANSHIP KNOWLEDGE
LO3: Know how to identify military aircraft
Introduction: <ul style="list-style-type: none">• Introduce the method of identifying military aircraft types
Identity: <ul style="list-style-type: none">• Explain what is mean by aircraft identity, including:<ul style="list-style-type: none">○ Aircraft suffix titles○ Uses of the type or reporting name○ Role letters
Military aircraft types: <ul style="list-style-type: none">• Explain military aircraft types, including their:<ul style="list-style-type: none">○ Characteristics○ Roles in air power
Activity 1: <ul style="list-style-type: none">• Cadet should practice identifying military aircraft types
Review: <ul style="list-style-type: none">• Review how to identify military aircraft
Formative assessment: <ul style="list-style-type: none">• Formative assessment of how to identify military aircraft

AIRMANSHIP KNOWLEDGE

Subject review:

- Review of the subject and activities

Preparation for summative assessment:
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- Prepare for Online Assessment on Utlilearn

AIRMANSHIP KNOWLEDGE	
Assessment Criteria for Each Learning Outcome	
Subject	Airmanship Knowledge
Classification	Leading Cadet
BTEC Aviation Studies	Unit 6: Airmanship Knowledge for Air Cadets
Learning Outcome The learner will:	Assessment Criterion The learner can:
LO1: Know types of airfield operations used for the control of aircraft	P1: Describe roles of aerodrome, approach and runway controllers
	P2: Describe main communication methods used by air traffic control
	P3: Describe radar methods used in airfield operations
LO2: Know the Rules of the Air	P4: Identify the classes of aircraft within Rules of the Air
	P5: Describe the rules for similar aircraft when: overtaking, approaching head on, converging, approaching to land and landing in an emergency
	P6: Identify the navigation light placements for classes of aircraft
	P7: Describe the clock code reporting method
LO3: Know how to identify military aircraft	P8: Describe military aircraft suffix titles and their meanings

ACO Aviation Training Syllabus

Glossary of Terms

Term	Meaning
Learning outcomes	What a cadet is expected to know, understand or be able to do.
Assessment criteria	The standard a cadet is expected to meet to demonstrate that a learning outcome, or set of learning outcomes, has been achieved.
Guidance to instructors on subject delivery	A programme that gives the instructor guidance on the content and suggested order of delivery for a particular subject. It will include the learning outcomes, what should be covered to achieve those outcomes and any relevant practical activities.
Formative assessment	Regular and informal assessment that provides feedback throughout the learning process that supports the cadet's progress. This can take the form of checks of understanding through question and answer sessions or demonstration of an activity.
Summative assessment	Assessment of learning by an HQ Air Cadets paper-based examination or online assessment. A cadet will have to correctly answer a question that directly relates to an assessment criterion.
Examination	Paper-based exclusive choice question paper for the old syllabus subjects for Leading, Senior and Master Air Cadet.
Online assessment	Online assessment process, accessed through Utlilearn, for Leading Cadet from Sep 10 and Senior and Master Air Cadet from Sep 11.
Lesson check of understanding	Throughout and at the end of each lesson there should be a check of understanding. At the start of the next lesson, the previous check of understanding should be reviewed in order to consolidate previous learning before moving on to new learning.
Check of understanding for First Class Cadet	This is a competence-based assessment process for First Class Cadet which should test understanding through practical demonstration, activity observation, oral questioning and inspection.