



AVAT11001 Aviation Theory I

Term 2 - 2017

Profile information current as at 08/05/2024 11:46 am

All details in this unit profile for AVAT11001 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

This unit provides the basic aeronautical knowledge theory required by commercial pilot students wishing to undertake the CASA General Flying Progress Test, and the air law theory required by commercial pilot students wishing to undertake the CASA CPL examination. Topics covered include aerodynamics, aircraft systems, air law, meteorology, navigation, loading, performance, and radio telephony, and documentation, pilot licences and ratings, air service operations, aerodromes, airspace classifications, air traffic control and flight service, and handling emergencies. It also introduces students to the aviation industry, its history, current events, and trends where it is going in the future. In addition to the recommended printed materials, students must obtain the current issues of CAO, CAR, CAAP, AIP, ERS(A). This documentation is available from Air Services Australia in Melbourne.

Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: 12

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.25

Pre-requisites or Co-requisites

There are no requisites for this unit.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

Offerings For Term 2 - 2017

- Bundaberg
- Distance

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

Class and Assessment Overview

Recommended Student Time Commitment

Each 12-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 25 hours of study per week, making a total of 300 hours for the unit.

Class Timetable

[Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

[Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Online Quiz(zes)**

Weighting: 7%

2. **Online Quiz(zes)**

Weighting: 7%

3. **Online Quiz(zes)**

Weighting: 7%

4. **Online Quiz(zes)**

Weighting: 7%

5. **Online Quiz(zes)**

Weighting: 7%

6. **Online Quiz(zes)**

Weighting: 7%

7. **Online Quiz(zes)**

Weighting: 7%

8. **Online Quiz(zes)**

Weighting: 7%

9. **Online Quiz(zes)**

Weighting: 7%

10. **Online Quiz(zes)**

Weighting: 7%

11. **Written Assessment**

Weighting: 30%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the [CQUniversity Policy site](#).

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Have Your Say

Feedback

The lecture videos help the course to be easier to understand and like an actual physical classroom.

Recommendation

Increase use of videos

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Differentiate types of flying machines across the ages and provide appropriate aviation definitions.
2. Explain the relevant natural laws impacting on aerodynamics, including weight and balance requirements, during all stages of flight
3. Differentiate the various human factors and its impact on aviation safety
4. Explain the impact of various meteorological conditions on aviation
5. Identify legal requirements for aircraft and pilots
6. Demonstrate appropriate aviation radio communication
7. Prepare and apply basic aircraft navigation and aircraft performance

Alignment of Learning Outcomes, Assessment and Graduate Attributes



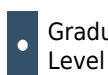
N/A
Level



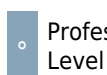
Introductory
Level



Intermediate
Level



Graduate
Level



Professional
Level



Advanced
Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes						
	1	2	3	4	5	6	7
1 - Online Quiz(zes) - 7%	•						
2 - Online Quiz(zes) - 7%		•					
3 - Online Quiz(zes) - 7%			•				
4 - Online Quiz(zes) - 7%				•			
5 - Online Quiz(zes) - 7%					•		
6 - Online Quiz(zes) - 7%						•	
7 - Online Quiz(zes) - 7%							•
8 - Written Assessment - 30%	•				•		

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes						
	1	2	3	4	5	6	7
1 - Communication	•	•	•	•		•	•
2 - Problem Solving	•	•	•	•		•	
3 - Critical Thinking	•	•	•			•	•
4 - Information Literacy	•	•	•	•	•	•	•
5 - Team Work	•			•			
6 - Information Technology Competence	•						•
7 - Cross Cultural Competence	•					•	
8 - Ethical practice	•		•	•	•	•	
9 - Social Innovation							
10 - Aboriginal and Torres Strait Islander Cultures							

Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Online Quiz(zes) - 7%		•		•						

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
2 - Online Quiz(zes) - 7%		•	•							
3 - Online Quiz(zes) - 7%		•	•	•				•		
4 - Online Quiz(zes) - 7%		•	•					•		
5 - Online Quiz(zes) - 7%		•	•					•		
6 - Online Quiz(zes) - 7%		•	•					•		
7 - Online Quiz(zes) - 7%		•	•					•		
8 - Online Quiz(zes) - 7%		•	•							
9 - Online Quiz(zes) - 7%	•	•	•					•		
10 - Online Quiz(zes) - 7%		•	•	•				•		
11 - Written Assessment - 30%	•	•	•	•	•	•		•		

Textbooks and Resources

Textbooks

AVAT11001

Prescribed

Basic Aeronautical Knowledge (BAK)

(2013)

Authors: David Robinson

Aviation Theory Centre

Darra , Queensland , Australia

ISBN: 1-875537570

Binding: Paperback

AVAT11001

Prescribed

Visual Flight Guide (VFG)

Edition: 2015 (2015)

Authors: Aviation Theory Centre

Aviation Theory Centre

Darra , Queensland , Australia

ISBN: 1875537783

Binding: Hardcover

Additional Textbook Information

Thanks for choosing CQUniversity Aviation Course. If the bookstore is out you can order direct from Aviation Theory Centre online. Visual Flight Guide [product code at Aviation Theory Centre is ATB42-05](#)

[You can also download the Visual Flight Guide or app from CASA/Airservices.](#)

[View textbooks at the CQUniversity Bookshop](#)

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Ron Bishop Unit Coordinator

r.bishop@cqu.edu.au

Schedule

Week 1 - 10 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Aircraft and Terminology	1 & 3	

Week 2 - 17 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Radio Communications	2	
Week 3 - 24 Jul 2017		
Module/Topic	Chapter	Events and Submissions/Topic
Aircraft General Knowledge	4	Online Quiz(zes) Due: Week 3 Monday (24 July 2017) 9:00 am AEST
Week 4 - 31 Jul 2017		
Module/Topic	Chapter	Events and Submissions/Topic
Aircraft General Knowledge	4	Online Quiz(zes) Due: Week 4 Monday (31 July 2017) 9:00 am AEST
Week 5 - 07 Aug 2017		
Module/Topic	Chapter	Events and Submissions/Topic
Aviation Law	5	Online Quiz(zes) Due: Week 5 Monday (7 Aug 2017) 9:00 am AEST
Vacation Week - 14 Aug 2017		
Module/Topic	Chapter	Events and Submissions/Topic
Week 6 - 21 Aug 2017		
Module/Topic	Chapter	Events and Submissions/Topic
Aerodynamics Basic	6	Online Quiz(zes) Due: Week 6 Monday (21 Aug 2017) 9:00 am AEST
Week 7 - 28 Aug 2017		
Module/Topic	Chapter	Events and Submissions/Topic
Aerodynamics Performance	6	Online Quiz(zes) Due: Week 7 Monday (28 Aug 2017) 9:00 am AEST
Week 8 - 04 Sep 2017		
Module/Topic	Chapter	Events and Submissions/Topic
Human Factors	8	Online Quiz(zes) Due: Week 8 Monday (4 Sept 2017) 9:00 am AEST
Week 9 - 11 Sep 2017		
Module/Topic	Chapter	Events and Submissions/Topic
The Atmosphere & Meteorology	7 & 9	Online Quiz(zes) Due: Week 9 Monday (11 Sept 2017) 9:00 am AEST
Week 10 - 18 Sep 2017		
Module/Topic	Chapter	Events and Submissions/Topic
Loading	10	Online Quiz(zes) Due: Week 10 Monday (18 Sept 2017) 9:00 am AEST
Week 11 - 25 Sep 2017		
Module/Topic	Chapter	Events and Submissions/Topic
Performance	11	Online Quiz(zes) Due: Week 11 Monday (25 Sept 2017) 9:00 am AEST
Week 12 - 02 Oct 2017		
Module/Topic	Chapter	Events and Submissions/Topic
Navigation	12	Online Quiz(zes) Due: Week 12 Monday (2 Oct 2017) 9:00 am AEST Written Assessment Due: Week 12 Friday (6 Oct 2017) 9:00 am AEST
Review/Exam Week - 09 Oct 2017		
Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Online Quiz(zes)

Assessment Type

Online Quiz(zes)

Task Description

10 Questions covering the texts, powerpoints, and video presentations.

Number of Quizzes

1

Frequency of Quizzes
Assessment Due Date

Week 3 Monday (24 July 2017) 9:00 am AEST

Return Date to Students

Return on completion of Quiz

Weighting

7%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Learning Outcomes Assessed

- Differentiate types of flying machines across the ages and provide appropriate aviation definitions.

Graduate Attributes

- Problem Solving
- Information Literacy

2 Online Quiz(zes)

Assessment Type

Online Quiz(zes)

Task Description

No Assessment Task Description

Number of Quizzes

1

Frequency of Quizzes
Assessment Due Date

Week 4 Monday (31 July 2017) 9:00 am AEST

Return Date to Students

Return on completion of Quiz

Weighting

7%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Learning Outcomes Assessed

- Explain the relevant natural laws impacting on aerodynamics, including weight and balance requirements, during all stages of flight

Graduate Attributes

- Problem Solving
- Critical Thinking

3 Online Quiz(zes)

Assessment Type

Online Quiz(zes)

Task Description

No Assessment Task Description

Number of Quizzes

1

Frequency of Quizzes

Assessment Due Date

Week 5 Monday (7 Aug 2017) 9:00 am AEST

Return Date to Students

Return on completion of Quiz

Weighting

7%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Learning Outcomes Assessed

- Differentiate the various human factors and its impact on aviation safety

Graduate Attributes

- Problem Solving
- Critical Thinking
- Information Literacy
- Ethical practice

4 Online Quiz(zes)

Assessment Type

Online Quiz(zes)

Task Description

No Assessment Task Description

Number of Quizzes

1

Frequency of Quizzes

Assessment Due Date

Week 6 Monday (21 Aug 2017) 9:00 am AEST

Return Date to Students

Return on completion of Quiz

Weighting

7%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Learning Outcomes Assessed

- Explain the impact of various meteorological conditions on aviation

Graduate Attributes

- Problem Solving
- Critical Thinking
- Ethical practice

5 Online Quiz(zes)

Assessment Type

Online Quiz(zes)

Task Description

No Assessment Task Description

Number of Quizzes

1

Frequency of Quizzes**Assessment Due Date**

Week 7 Monday (28 Aug 2017) 9:00 am AEST

Return Date to Students

Return on completion of Quiz

Weighting

7%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Learning Outcomes Assessed

- Identify legal requirements for aircraft and pilots

Graduate Attributes

- Problem Solving
- Critical Thinking
- Ethical practice

6 Online Quiz(zes)

Assessment Type

Online Quiz(zes)

Task Description

No Assessment Task Description

Number of Quizzes

1

Frequency of Quizzes**Assessment Due Date**

Week 8 Monday (4 Sept 2017) 9:00 am AEST

Return Date to Students

Return on completion of Quiz

Weighting

7%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Learning Outcomes Assessed

- Demonstrate appropriate aviation radio communication

Graduate Attributes

- Problem Solving
- Critical Thinking
- Ethical practice

7 Online Quiz(zes)

Assessment Type

Online Quiz(zes)

Task Description

No Assessment Task Description

Number of Quizzes

1

Frequency of Quizzes**Assessment Due Date**

Week 9 Monday (11 Sept 2017) 9:00 am AEST

Return Date to Students

Return on completion of Quiz

Weighting

7%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Learning Outcomes Assessed

- Prepare and apply basic aircraft navigation and aircraft performance

Graduate Attributes

- Problem Solving
- Critical Thinking
- Ethical practice

8 Online Quiz(zes)

Assessment Type

Online Quiz(zes)

Task Description

No Assessment Task Description

Number of Quizzes

1

Frequency of Quizzes**Assessment Due Date**

Week 10 Monday (18 Sept 2017) 9:00 am AEST

Return Date to Students

Return on completion of Quiz

Weighting

7%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Graduate Attributes

- Problem Solving
- Critical Thinking

9 Online Quiz(zes)

Assessment Type

Online Quiz(zes)

Task Description

No Assessment Task Description

Number of Quizzes

1

Frequency of Quizzes**Assessment Due Date**

Week 11 Monday (25 Sept 2017) 9:00 am AEST

Return Date to Students

Return on completion of Quiz

Weighting

7%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Ethical practice

10 Online Quiz(zes)

Assessment Type

Online Quiz(zes)

Task Description

No Assessment Task Description

Number of Quizzes

1

Frequency of Quizzes**Assessment Due Date**

Week 12 Monday (2 Oct 2017) 9:00 am AEST

Return Date to Students

Return on completion of Quiz

Weighting

7%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Graduate Attributes

- Problem Solving
- Critical Thinking
- Information Literacy
- Ethical practice

11 Written Assessment

Assessment Type

Written Assessment

Task Description

This assignment will broaden your understanding of aviation history in Australia. You will need to scan relevant literature (textbooks, websites, etc) to explain Australia's history pertaining to aviation from the beginning to current events.

Your paper should briefly cover the following areas:

- The history of aviation. The development of the aircraft and the implications and limitations of materials, technology, etc., throughout its history and the people that were involved should be discussed.
- Milestones of aviation development matched to historical events.
- Economic viability of aviation and the main sources of income throughout the years.
- Key technological advances in aviation (eg. closed cockpits, monoplanes, variable pitch propeller, pressurization, safety equipment, jet engines)
- Historical flights and events, (eg., Bert Hinkler's flight to Sydney, Charles Lindbergh's trans-oceanic flight, Amelia Earhart) and their impact on aviation and its development.

The paper will draw on sourced literature and other sources. (Hint: Use the Library's resource search and online journal databases, (eg., Ebscohost, books, videos, etc.)

Format

The paper is to be written in essay format, with an Introduction, Body, and Conclusion and will be properly referenced using the Harvard Style. An abstract is required. Do not provide a table of contents. Pages should be numbered in Arabic numerals at the top right corner, except for the title page (no page number) and the abstract should have Roman numerals starting at ii. 2200 words maximum.

Turn in writing assignment through Moodle

Assessment Due Date

Week 12 Friday (6 Oct 2017) 9:00 am AEST

Return Date to Students

Within 2 weeks after due date

Weighting

30%

Assessment Criteria

Aviation Theory 1 AVAT11001 Marking Criteria

Assessment Criteria	Marks
Evidence of a suitable introduction that informs the reader of the topic as outlined in the assessment task:	2/2
Evidence of a conclusion that summarises, in a logical manner, the information presented in the discussion of the topic as outlined in the assessment task:	2/2
Demonstrate your understanding and knowledge of the historical development of aviation in Australia as outlined in the assessment task, and provide evidence through relevant analysis and discussion, using appropriate references from scholarly literature/texts to support your essay: 8 marks	8/8
Show your understanding through well informed and critical discussion of the conditions and technological advances which lead to the expansion and development of aviation with appropriate use of examples and milestones as outlined in the assessment task, through relevant analysis and discussion, using appropriate references from scholarly literature to support your essay: 8 marks	8/8
Evidence of additional research beyond the course material and prescribed textbook through the use of academic scholarly journal articles and other texts. : 5 marks	5/5
Presentation, including correct in-text referencing, bibliography, formatting, layout (essay format) and grammar: 5 marks.	5/5
TOTAL MARKS	30/30

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Learning Outcomes Assessed

- Differentiate types of flying machines across the ages and provide appropriate aviation definitions.
- Identify legal requirements for aircraft and pilots

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Ethical practice

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?



Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem