



## UNSW Course Outline

# AVIA2112 Commercial Meteorology - 2024

Published on the 28 Jan 2024

## General Course Information

**Course Code :** AVIA2112

**Year :** 2024

**Term :** Term 1

**Teaching Period :** T1

**Is a multi-term course? :** No

**Faculty :** Faculty of Science

**Academic Unit :** School of Aviation

**Delivery Mode :** In Person

**Delivery Format :** Standard

**Delivery Location :** Kensington

**Campus :** Sydney

**Study Level :** Undergraduate

**Units of Credit :** 6

### Useful Links

[Handbook Class Timetable](#)

## Course Details & Outcomes

### Course Description

This course introduces students to all of the aeronautical knowledge training required by the CASR 1998 Part 61 MOS for commercial pilot licence level meteorology, specifically the PMTC and CMTC units of competency. The course explores key concepts of aviation meteorology, with

a focus on understanding legislation relating to aviation meteorology, and information in aviation weather forecasts and reports. A combination of synchronous learning and discussion is used to teach key concepts, knowledge and skills, and homework and class quizzes are also provided to assess retention and understanding of student learning.

## Course Aims

The aim of this course is to help students achieve the aeronautical knowledge requirements in relation to meteorology for the issue of an Australian Commercial Pilot Licence. The course aims to support students' acquisition of necessary skills and knowledge through the delivery of a series of collaborative lecture presentations followed by discussion of each topic to consolidate concepts. To ensure that students feel supported prior to sitting the mandatory CASA examination for this course and are confident in their understanding of the required knowledge, preparatory support and foundational knowledge checks with feedback provided on each student's performance are integrated throughout the course.

The standards achieved are to meet or exceed those outlined by the Civil Aviation Safety Authority and communicated in the UNSW Operations Manual.

## Relationship to Other Courses

Pre requisite course AVIA1111

# Course Learning Outcomes

Course Learning Outcomes
CLO1 : Amend and keep up to date a personal copy of current legislation versions, interpret and apply legislation relating to aviation meteorology.
CLO2 : Decode and apply aviation weather forecasts and reports for various flight contexts.
CLO3 : Satisfy the theoretical knowledge requirements of the CASR 1998 Part 61 MOS for the PMTC and CMTC units of competency.

Course Learning Outcomes	Assessment Item
CLO1 : Amend and keep up to date a personal copy of current legislation versions, interpret and apply legislation relating to aviation meteorology.	<ul style="list-style-type: none"><li>• Foundation knowledge check</li><li>• Comprehensive knowledge check</li><li>• CASA CPL Meteorology (CASA CMET) Exam</li></ul>
CLO2 : Decode and apply aviation weather forecasts and reports for various flight contexts.	<ul style="list-style-type: none"><li>• Foundation knowledge check</li><li>• Comprehensive knowledge check</li><li>• CASA CPL Meteorology (CASA CMET) Exam</li></ul>
CLO3 : Satisfy the theoretical knowledge requirements of the CASR 1998 Part 61 MOS for the PMTC and CMTC units of competency.	<ul style="list-style-type: none"><li>• Foundation knowledge check</li><li>• Comprehensive knowledge check</li><li>• CASA CPL Meteorology (CASA CMET) Exam</li></ul>

## Learning and Teaching Technologies

Moodle - Learning Management System | Blackboard Collaborate

## Assessments

### Assessment Structure

Assessment Item	Weight	Relevant Dates
Foundation knowledge check Assessment Format: Individual	20%	Start Date: Day 5 Due Date: Day 5
Comprehensive knowledge check Assessment Format: Individual	30%	Start Date: Day 8 Due Date: Day 8
CASA CPL Meteorology (CASA CMET) Exam Assessment Format: Individual	50%	Start Date: As booked for you at the external CASA examination centre Due Date: As per individual booked exam on either 02/04/24 or 03/04/24

# **Assessment Details**

## **Foundation knowledge check**

### Assessment Overview

For the Foundation Knowledge Check assessment, you are required to undertake a test at the end of Day 5, comprised of short answer questions. The test will assess your understanding of foundation navigation material covered in Days 1-5.

You will be provided with 90 minutes to complete the test.

Marks will be provided to students immediately upon completion of the foundation check.

General feedback on student performance with an emphasis on identified problem areas will also be provided verbally by the instructor in the class following the knowledge check submission deadline.

### Course Learning Outcomes

- CLO1 : Amend and keep up to date a personal copy of current legislation versions, interpret and apply legislation relating to aviation meteorology.
- CLO2 : Decode and apply aviation weather forecasts and reports for various flight contexts.
- CLO3 : Satisfy the theoretical knowledge requirements of the CASR 1998 Part 61 MOS for the PMTC and CMTC units of competency.

### Detailed Assessment Description

30 multiple choice questions. 90 mins.

### Assessment Length

90 mins

### Assignment submission Turnitin type

This is not a Turnitin assignment

## **Comprehensive knowledge check**

### Assessment Overview

For the Comprehensive Knowledge Check assessment, you are required to undertake a test on Day 8, comprised of short answer questions. The test will assess your understanding of material covered in Days 1-7.

You will be provided with 90 minutes to complete the test.

General feedback on student performance with an emphasis on identified problem areas will also be provided verbally by the instructor in the class following the comprehensive knowledge check submission deadline.

#### **Course Learning Outcomes**

- CLO1 : Amend and keep up to date a personal copy of current legislation versions, interpret and apply legislation relating to aviation meteorology.
- CLO2 : Decode and apply aviation weather forecasts and reports for various flight contexts.
- CLO3 : Satisfy the theoretical knowledge requirements of the CASR 1998 Part 61 MOS for the PMTC and CMTC units of competency.

#### **Detailed Assessment Description**

30 questions, short written answers

#### **Assessment Length**

90 mins

#### **Assignment submission Turnitin type**

This is not a Turnitin assignment

### **CASA CPL Meteorology (CASA CMET) Exam**

#### **Assessment Overview**

For this assessment, you are required to complete a federally mandated examination conducted by the aviation regulator (CASA) external to UNSW. The exam will test your knowledge of the syllabus in Part 61 Manual of Standards (MOS) schedule 3.

You will be provided with 90 minutes to complete the examination. Feedback will be provided immediately after the examination via the Knowledge Deficiency Report.

As the flying training is conducted under Civil Aviation Safety Regulation 1998 Part 142 approval, students must not arrange, transfer, or sit exams without Head of Operations approval. All first attempts at exams will be arranged by UNSW.

You must provide the original CASA result notification to the Head of Operations as evidence that you have passed a CASA exam within the time allowed.

The mark to pass this examination is a minimum of 70%. Failure to attempt or pass this assessment will result in the award of a UF grade.

### Course Learning Outcomes

- CLO1 : Amend and keep up to date a personal copy of current legislation versions, interpret and apply legislation relating to aviation meteorology.
- CLO2 : Decode and apply aviation weather forecasts and reports for various flight contexts.
- CLO3 : Satisfy the theoretical knowledge requirements of the CASR 1998 Part 61 MOS for the PMTC and CMTC units of competency.

### Assessment Length

90 mins

### Assignment submission Turnitin type

This is not a Turnitin assignment

### Hurdle rules

Assessment task 3 is an essential component of the course. **Failure to attempt or pass assessment 3 will result in the award of a UF grade for AVIA 2112.**

If a student does not pass assessment task 3 at the first attempt, then the result for AVIA 2115 will be capped at 50% regardless of performance in the other assessment tasks, provided the student subsequently passes assessment task 3 within the time allowed. Assessment task 3 must be satisfactorily completed no later than the last day of the applicable exam period following the term AVIA2112 was enrolled in. The last day of the exam period is determined by the published UNSW academic calendar available at <https://www.student.unsw.edu.au/calendar>

## General Assessment Information

### Grading Basis

Standard

# Course Schedule

Teaching Week/Module	Activity Type	Content
Week 8 : 1 April - 7 April	Lecture	Met Day 1 PPT: (1) Composition of the atmosphere PPT: (2) Pressure PPT: (3) Density PPT: (4) Altimetry  Met Day 2 PPT: (5) Temperature PPT: (6) Humidity PPT: (7) Adiabatics & Stability
Week 9 : 8 April - 14 April	Lecture	Met Day 3 PPT: (8) Clouds & Precipitation PPT: (9) Clouds & Precipitation PPT: (10) Visibility  Met Day 4 PPT: (11) Aircraft Icing PPT: (12) Thunderstorms PPT: (13) Turbulence PPT: (14) Winds
Week 10 : 15 April - 21 April	Lecture	Met Day 5 Foundation Knowledge Check – 30 questions, multiple choice PPT: (15) Winds (Local) PPT: (16) Winds (High level) PPT: (17) Air Masses & Fronts PPT: (18) Climatology Met Day 6 PPT: (19) Remote Sensing & Satellite Images PPT: (20) Weather Services Part 1 PPT: (20) Weather Services Part 2
Week 11 : 22 April - 28 April	Lecture	Met Day 7 PPT: (21) Weather Services PPT: (22) Weather Services  Met Day 8 Comprehensive Knowledge Check – 30 questions, short written answers Questions and revision

## Attendance Requirements

Please note that lecture recordings are not available for this course. Students are strongly encouraged to attend all classes and contact the Course Authority to make alternative arrangements for classes missed.

## General Schedule Information

The course will be completed in class, 2 days per week (6 contact hours per day), over 4 weeks.

The subject is conducted face to face at the Bankstown FOU, and class times start at 0830 and go to approximately 1550, depending on student questions and queries.

# Course Resources

## Prescribed Resources

A comprehensive series of online notes and practice questions are available to students on Moodle. All handouts, quizzes and reviews are within the respective Moodle folders.

Access to UNSW Moodle is through the following link and student key

CPL Meteorology

[FOUAK - CPL - MET \(unsw.edu.au\)](#)

FOUAK\_CPL\_MET\_STD\_2020

## Recommended Resources

The following textbook is provided for enrolled students:

Aviation Theory "Meteorology for Private & Commercial Pilot Licences"

UNSW Operations Manual and CASR 1998 Part 61 MOS, PMTC and CMTC units of competency

## Additional Costs

A breakdown of possible additional direct flying costs can be found in the Professional Pilots Procedures Manual v18.2 June 2023. A copy of this manual can be downloaded from the FOU intranet at [Library | School of Aviation \(unsw.edu.au\)](#)

## Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Head lecturer	Jeremy Andrews		Bankstown	97911151	97911151	No	No
Convenor	Neil Windle		Bankstown	97911151	By appointment at the FOU	Yes	Yes

## Other Useful Information

### Academic Information

Upon your enrolment at UNSW, you share responsibility with us for maintaining a safe,

harmonious and tolerant University environment.

You are required to:

- Comply with the University's conditions of enrolment.
- Act responsibly, ethically, safely and with integrity.
- Observe standards of equity and respect in dealing with every member of the UNSW community.
- Engage in lawful behaviour.
- Use and care for University resources in a responsible and appropriate manner.
- Maintain the University's reputation and good standing.

For more information, visit the [UNSW Student Code of Conduct Website](#).

## Academic Honesty and Plagiarism

**Referencing** is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.

Further information about referencing styles can be located at <https://student.unsw.edu.au/referencing>

**Academic integrity** is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage. At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

Further information about academic integrity, plagiarism and the use of AI in assessments can be located at:

- The [Current Students site](#),
- The [ELISE training site](#), and
- The [Use of AI for assessments](#) site.

The Student Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: <https://student.unsw.edu.au/conduct>

## Submission of Assessment Tasks

### Penalty for Late Submissions

UNSW has a standard late submission penalty of:

- 5% per day,
- for all assessments where a penalty applies,
- capped at five days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

***Any variations to the above will be explicitly stated in the Course Outline for a given course or assessment task.***

Students are expected to manage their time to meet deadlines and to request extensions as early as possible before the deadline.

### **Special Consideration**

If circumstances prevent you from attending/completing an assessment task, you must officially apply for special consideration, usually within 3 days of the sitting date/due date. You can apply by logging onto myUNSW and following the link in the My Student Profile Tab. Medical documentation or other documentation explaining your absence must be submitted with your application. Once your application has been assessed, you will be contacted via your student email address to be advised of the official outcome and any actions that need to be taken from there. For more information about special consideration, please visit: <https://student.unsw.edu.au/special-consideration>

**Important note:** UNSW has a “fit to sit/submit” rule, which means that if you sit an exam or submit a piece of assessment, you are declaring yourself fit to do so and cannot later apply for Special Consideration. This is to ensure that if you feel unwell or are faced with significant circumstances beyond your control that affect your ability to study, you do not sit an examination or submit an assessment that does not reflect your best performance. Instead, you should apply for Special Consideration as soon as you realise you are not well enough or are otherwise unable to sit or submit an assessment.

### **Faculty-specific Information**

#### **Additional support for students**

- [The Current Students Gateway](#)
- [Student Support](#)
- [Academic Skills and Support](#)
- [Student Wellbeing, Health and Safety](#)
- [Equitable Learning Services](#)
- [UNSW IT Service Centre](#)

- Science EDI Student [Initiatives](#), [Offerings](#) and [Guidelines](#)

## School Contact Information

**Email:**

aviation@unsw.edu.au

**Telephone:**

Undergraduate Courses - +61 2 9385 5756 (Katie Wang)

Postgraduate Courses - +61 2 9385 5787 (Michelle Lee)