



## UNSW Course Outline

# AVIA2113 Commercial Human Factors, Flight Rules and Air Law - 2024

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## General Course Information

Course Code : AVIA2113

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 Human Factors, Flight Rules and Air Law, specifically, the CHFC, CFRA and CFRC units of competency. The course explores key concepts of commercial human factors, flight rules, and air law, with a focus on understanding human factors applicable to flight crew, the relationship between theoretical human factors concepts and conditions found in piloting aircraft, and the theoretical and practical aspects of aviation law relating to flight crew and Pilots in Command of commercial Visual Flight Rules (VFR) flight. 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 students to assess retention and understanding of their learning.

## Course Aims

The aim of this course is to help students achieve the aeronautical knowledge requirements in relation to Human Factors, Flight Rules and Air Law (aeroplanes) 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 laid down by the Civil Aviation Safety Authority as per the UNSW Operations Manual.

## Relationship to Other Courses

Pre-requisite: AVIA1111

## Course Learning Outcomes

Course Learning Outcomes
CLO1 : Define and explain Human Factors concepts applicable to flight crew.
CLO2 : Relate theoretical Human Factors concepts to conditions found in piloting aircraft.
CLO3 : Explain theoretical and practical aspects of aviation law as it relates to flight crew and Pilot in Command of commercial VFR flight.
CLO4 : Satisfy the theoretical knowledge requirements of the CASR 1998 Part 61 MOS for the CHFC, CFRA & CFRC units of competency.

Course Learning Outcomes	Assessment Item
CLO1 : Define and explain Human Factors concepts applicable to flight crew.	<ul style="list-style-type: none"> <li>• Comprehensive knowledge check</li> <li>• CASA CPL Human Factors (CASA CHUF) Exam</li> </ul>
CLO2 : Relate theoretical Human Factors concepts to conditions found in piloting aircraft.	<ul style="list-style-type: none"> <li>• Comprehensive knowledge check</li> <li>• CASA CPL Human Factors (CASA CHUF) Exam</li> </ul>
CLO3 : Explain theoretical and practical aspects of aviation law as it relates to flight crew and Pilot in Command of commercial VFR flight.	<ul style="list-style-type: none"> <li>• CASA CPL Flight Rules &amp; Air Law (CASA CLWA) Exam</li> <li>• Comprehensive knowledge check</li> </ul>
CLO4 : Satisfy the theoretical knowledge requirements of the CASR 1998 Part 61 MOS for the CHFC, CFRA & CFRC units of competency.	<ul style="list-style-type: none"> <li>• CASA CPL Flight Rules &amp; Air Law (CASA CLWA) Exam</li> <li>• CASA CPL Human Factors (CASA CHUF) Exam</li> <li>• Comprehensive knowledge check</li> </ul>

## Learning and Teaching Technologies

Moodle - Learning Management System

## Additional Course Information

NIL

## Assessments

### Assessment Structure

Assessment Item	Weight	Relevant Dates
Comprehensive knowledge check Assessment Format: Individual	20%	Start Date: Assessment 1A: Air Law Course Day 4    Assessment 1B: Human Factors Course Day 4 Due Date: Assessment 1A: 22nd March 2024    Assessment 1B: 7th March 2024
CASA CPL Human Factors (CASA CHUF) Exam Assessment Format: Individual	40%	Start Date: As booked for you at the external CASA examination centre being March 14th 15th or 16th 2024 Due Date: As per individual Booked exam on March 14th, 15th or 16th 2024
CASA CPL Flight Rules & Air Law (CASA CLWA) Exam Assessment Format: Individual	40%	Start Date: As booked for you at the external CASA examination centre being 26, 27 or 28 March 2024. Due Date: As booked for you at the external CASA examination centre being 26, 27 or 28 March 2024.

# Assessment Details

## Comprehensive knowledge check

### Assessment Overview

This assessment comprises of two knowledge checks, 1A for flight rules and air law, and 1B for human factors (each weighted 10%; total 20% for this assessment), with each assessing your knowledge of different content explored in the course.

Assessment 1A assesses your knowledge of Flight Rules and Air Law and comprises multiple-choice questions. You are required to complete this assessment on Day 4, and you will be provided with 60 minutes to complete the test.

Assessment 1B assesses your knowledge of Human Factors and comprises of multiple-choice questions. You are required to complete this assessment by Day 4 and you will be provided with 60 minutes to complete the test.

Marks will be provided to students immediately upon completion of each knowledge 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 each knowledge check submission deadline.

### Course Learning Outcomes

- CL01 : Define and explain Human Factors concepts applicable to flight crew.
- CL02 : Relate theoretical Human Factors concepts to conditions found in piloting aircraft.
- CL03 : Explain theoretical and practical aspects of aviation law as it relates to flight crew and Pilot in Command of commercial VFR flight.
- CL04 : Satisfy the theoretical knowledge requirements of the CASR 1998 Part 61 MOS for the CHFC, CFRA & CFRC units of competency.

### Detailed Assessment Description

Assessment 1A: 30 multiple choice questions (open book)

Assessment 1B: 30 multiple choice questions (closed book)

### Assessment Length

Assessment 1A: 60 minutes    Assessment 1B: 60 minutes

### Assessment information

NIL

### Assignment submission Turnitin type

Not Applicable

## **CASA CPL Human Factors (CASA CHUF) 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 75 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 : Define and explain Human Factors concepts applicable to flight crew.
- CLO2 : Relate theoretical Human Factors concepts to conditions found in piloting aircraft.
- CLO4 : Satisfy the theoretical knowledge requirements of the CASR 1998 Part 61 MOS for the CHFC, CFRA & CFRC units of competency.

### Detailed Assessment Description

CASA multiple choice exam (typically approximately 40 questions)

### Assessment Length

75 minutes

### Submission notes

Nil

### Assessment information

NIL

### Assignment submission Turnitin type

Not Applicable

### Hurdle rules

If a student does not pass assessment task 2 at the first attempt, then the result for AVIA2113 will be capped at 50% regardless of performance in the other assessment tasks, provided the student subsequently passes all the assessment tasks within the time allowed.

Failure to attempt or pass Assessment Task 2 will result in a UF grade for AVIA 2113.

Where applicable, you must provide the original exam result notification to the Head of Operations as evidence that you have passed the CASA exam.

## **CASA CPL Flight Rules & Air Law (CASA CLWA) 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. The exam comprises of multiple-choice questions and numerical entry questions.

You will be provided with 120 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 80%. Failure to attempt or pass this assessment will result in the award of a UF grade.

### Course Learning Outcomes

- CL03 : Explain theoretical and practical aspects of aviation law as it relates to flight crew and Pilot in Command of commercial VFR flight.
- CL04 : Satisfy the theoretical knowledge requirements of the CASR 1998 Part 61 MOS for the CHFC, CFRA & CFRC units of competency.

### Detailed Assessment Description

120 minutes CASA exam

### Assessment Length

2 hours

### Assignment submission Turnitin type

This is not a Turnitin assignment

### Hurdle rules

If a student does not pass assessment task 3 at the first attempt, then the result for AVIA 2113 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.

Failure to attempt or pass assessment task 3 will result in the award of a UF grade for AVIA 2113.

Where applicable you must provide the original result notification to the Head of Operations as evidence that you have passed the CASA exam.

## **General Assessment Information**

### Grading Basis

Standard

# Course Schedule

Teaching Week/Module	Activity Type	Content
Week 3 : 26 February - 3 March	Lecture	CPL HUF Course Day 1: Aviation medicine, the atmosphere and its effects on human physiology, hypoxia, visual illusions. CPL HUF Course Day 2: Stress, fatigue, ergonomics, human information processing.
Week 4 : 4 March - 10 March	Lecture	
	Lecture	Human Factors
	Lecture	CPL HUF Course Day 3: Crew co-ordination, human behaviour, CRM, leadership styles, situational awareness. CPL HUF Course Day 4: Threat and Error Management, Revision, Assessment Task 1B
Week 6 : 18 March - 24 March	Lecture	<p>Flight Rules and Air Law</p> <p>Day 1</p> <p>01 UNSW Air Law Part 91 General Operating and Flight Rules</p> <p>01 Aircraft Category</p> <p>02 Aircraft Lighting</p> <p>03 Airspace Services and Terms</p> <p>04 Alerting &amp; Warning</p> <p>05 Alternate Planning Aerodrome Lighting</p> <p>06 Alternate Planning Navigation Aids</p> <p>07 Alternate Planning Weather</p> <p>Day 2</p> <p>08 Altimeter Setting Procedures</p> <p>09 Autopilot</p> <p>10 Comms NAVAID Failure</p> <p>11 Emergency Locator Transmitter</p> <p>12 Flight Recording Equipment</p> <p>13 Instruments for Flight</p> <p>14 Airborne Weather Radar</p> <p>15 Maintenance Release</p> <p>16 Mandatory Broadcast Area</p> <p>17 Oxygen Requirements</p> <p>19 Radio Communication Systems</p> <p>20 Visual Approach</p> <p>21 Passenger Carrying</p> <p>22 Aircraft Performance Category &amp; Handling Speeds</p> <p>23 IFR NVFR Recency Privileges Limitations</p> <p>CASR 67 Medical Certificates</p> <p>91 MOS</p> <p>Day 3</p> <p>02 UNSW Air Law Part 135 Air Transport Operations Small Aeroplanes</p> <p>135MOS</p> <p>02 CAR - Current</p> <p>1 CAO 48.1 Acronyms &amp; Definitions</p> <p>2 CAO 48.1 Acclimatisation</p> <p>3 CAO 48.1 Private Operations</p> <p>4 CAO 48.1 Multiple Appendices</p> <p>5 CAO 48.1 Split Duty</p> <p>6 CAO 48.1 Appendix 1 Simple Operations</p> <p>Day 4</p> <p>CAO 48.1 Appendix 2 Complex</p> <p>CAO 48.1 Appendix 4 Any</p> <p>01 Part 61 Preamble</p> <p>03 Part 61 CPL</p> <p>ENR</p> <p>GEN AD</p> <p>ERSA</p> <p>VTC</p> <p>ERC</p>



# 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

Human Factors classes shall be delivered over 4 days for each of two groups as follows:

Group A February 26th, 28th, March 4th, 6th 2024.

Group B February 27th, 29th, March 5th, 7th 2024

Flight Rules and Air Law classes shall be delivered over 4 days (March 18th to March 21st 2024).

All Human Factors classes shall commence at 8.30 a.m. at the Bankstown Flight Operations Unit, and conclude at approximately 3.45 p.m. Attendance rolls will be kept.

Flight Rules and Air Law classes will take place at the UNSW Kensington campus (room TBA), commencing at 8.30 a.m. each day.

## Course Resources

### Prescribed Resources

This course shall consist of lectures delivered face-to-face at the Bankstown FOU (Human Factors), and at the Kensington UNSW campus (Flight Rules and Air Law). All teaching shall be interactive with opportunities for students to ask questions and discuss related topics.

Lectures shall be supplemented with exercises and activities available on the UNSW Moodle platform using the following links and student keys:

[FOUAK - CPL - HF \(unsw.edu.au\)](https://unsw.edu.au/FOUAK-CPL-HF)

FOUAK\_CPL\_HF\_STD\_2020

[FOUAK - CPL - Law \(unsw.edu.au\)](https://unsw.edu.au/FOUAK-CPL-Law)

FOUAK\_CPL\_LAW\_STD\_2020

Extensive use shall be made of a variety of audio-visual presentations, e.g. videos and

Powerpoint presentations.

## Recommended Resources

1. Bob Tait's Aviation Theory: Human Performance and Limitations for the Private and Commercial Pilot Licences
2. Aviation Theory Centre: Flight Rules and Air Law for the Private and Commercial Pilot Licences
3. AIP, CARs, CASRs, ERSA
4. UNSW Operations Manual
5. CASR 1998 Part 61 MOS (CHFC, CRFC, CFRA 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 \(unsw.edu.au\)](https://library.soa.unsw.edu.au)

## Course Evaluation and Development

Student feedback will be via the UNSW My Experience system. Revision and exam preparation exercises are constantly updated.

## Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Lecturer	Barry Ellis		Bankstown FOU	02 9791 1151	By appointment	No	No
Convenor	Martin Jamieson		Bankstown FOU	02 97911151	By appointment	Yes	Yes
Head lecturer	Jeremy Andrews		Bankstown FOU	02 9791 1151	By appointment	No	No

## 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](https://student.unsw.edu.au/conduct).

## 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](https://student.unsw.edu.au/current-students),
- The [ELISE training site](https://student.unsw.edu.au/elise), and
- The [Use of AI for assessments](https://student.unsw.edu.au/use-of-ai) 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)