UNSW Course Outline

AVIG5914 Flying Operations 4 - 2024

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General Course Information

Course Code : AVIG5914
Year : 2024
Term : Term 2
Teaching Period : T2
Is a multi-term course? : No
Faculty : Faculty of Science
Academic Unit : School of Aviation
Delivery Mode : In Person
Delivery Format : Non Standard
Delivery Location : Bankstown
Campus : Sydney
Study Level : Postgraduate
Units of Credit : 12

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

This course covers the practical flying of multi-engine aeroplanes in commercial operations in all but extreme weather by day and night. The theory component completed in AVIA5913 is applied practically to the conduct of instrument flight rules flying operations. The practical training is an

integrated program of synthetic trainer exercises and flights. Flights are conducted day and night, in all weather conditions (except extreme) culminating in the flight test for the issue of an Instrument Rating.

Course Aims

The aim of this course is to consolidate more advanced aspects of practical commercial flying; namely, simulated air transport operations – smaller aeroplanes, night and instrument flying. Students will achieve a pass in the instrument rating flight test.

It is a key aim that students build on previous knowledge and experience and apply thier skills to more challenging equipment, scenarios, and weather.
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-requsite course is AVIG5913.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Describe the systems and procedures that are used in multi-engine aeroplanes, and aeroplanes fitted with CSU, G1000, retractable undercarriage and conventional navigation aids.
CLO2 : Apply principles of single pilot threat and error management to the conduct of Instrument Flight Rules (IFR) flying operations by day and night.
CLO3 : Explain the procedures and structures associated with a typical organisation that holds an AOC authorising commercial flying operations under the Instrument Flight Rules.
CLO4 : Recall and describe the knowledge that underpins private and commercial flying operations by day and night under the Instrument Flight Rules.
CLO5 : Demonstrate competence measured against relevant professional standards for general and cross-country flying.

Course Learning Outcomes	Assessment Item
CLO1 : Describe the systems and procedures that are used in multi-engine aeroplanes, and aeroplanes fitted with CSU, G1000, retractable undercarriage and conventional navigation aids.	• IR Dual Sorties • Instrument rating flight test
CLO2 : Apply principles of single pilot threat and error management to the conduct of Instrument Flight Rules (IFR) flying operations by day and night.	• IR Dual Sorties • Instrument rating flight test
CLO3 : Explain the procedures and structures associated with a typical organisation that holds an AOC authorising commercial flying operations under the Instrument Flight Rules.	• IR Dual Sorties • Instrument rating flight test
CLO4 : Recall and describe the knowledge that underpins private and commercial flying operations by day and night under the Instrument Flight Rules.	• IR Dual Sorties • Instrument rating flight test
CLO5 : Demonstrate competence measured against relevant professional standards for general and cross-country flying.	• IR Dual Sorties • Instrument rating flight test

Learning and Teaching Technologies

Ground preparation simulator and aeroplane training.

Learning and Teaching in this course

The practical flying component of the course is delivered via long and pre-flight briefings and airborne instruction. Critical to the development of higher order skills is the post-flight debriefing and subsequent reflection prior to the next flight.

This course aims to provide learning and teaching environments where students are actively engaged in the learning process with an emphasis on an aviation safety culture. The course aims to be interesting, challenging and enjoyable. Activities will have a high practical content and relevance to 'real world' situations.
A supportive environment is provided but there is an expectation that all students will take responsibility for their own learning and progress within the course. Assessment is designed to reflect the learning outcomes

Additional Course Information

Teaching times and locations are denoted in the flying schedule accessed via the Flying Operations unit intranet website https://www.fou.unsw.edu.au/ located in the Main Menu.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
IR Dual Sorties Assessment Format: Individual	100%	Start Date: Not Applicable Due Date: Not Applicable
Instrument rating flight test Assessment Format: Individual	0%	Start Date: Not Applicable Due Date: Not Applicable

Assessment Details

IR Dual Sorties

Assessment Overview

For this assessment, you will need to complete dual flights conducted and assessed as part of the instrument rating flying syllabus specified in Appendix E9 of the UNSW Operations Manual.

The syllabus of flying has been approved by the Civil Aviation Safety Authority and conforms to the applicable legislation.

You will receive feedback directly from the flying instructor immediately after each flight. You are required to certify the corresponding electronic training record prior to subsequent flights.

Course Learning Outcomes

- CLO1 : Describe the systems and procedures that are used in multi-engine aeroplanes, and aeroplanes fitted with CSU, G1000, retractable undercarriage and conventional navigation aids.
- CLO2 : Apply principles of single pilot threat and error management to the conduct of

Instrument Flight Rules (IFR) flying operations by day and night.
- CLO3 : Explain the procedures and structures associated with a typical organisation that holds an AOC authorising commercial flying operations under the Instrument Flight Rules.
- CLO4 : Recall and describe the knowledge that underpins private and commercial flying operations by day and night under the Instrument Flight Rules.
- CLO5 : Demonstrate competence measured against relevant professional standards for general and cross-country flying.

Detailed Assessment Description

Includes ground preparation and airborne demonstrations of flying skill.

Assessment Length

Syllabus and planned flight duration available in the Flying Training Manual, being E1 Part E of the Operations Manual

Assignment submission Turnitin type

This is not a Turnitin assignment

Hurdle rules

Students must successfully complete all flights in Phase 8, only then will a score be awarded for the final mark based upon execution, acumen, and airmanship. Failure to successfully complete all flights in Phase 8 will result in UF grade for AVIG5914.

Instrument rating flight test

Assessment Overview

For this hurdle task, you are to undertake a flight test on sortie 8.27, conducted by a qualified Flight Examiner in accordance with the Civil Aviation Safety Authority Flight Examiner Handbook and the Civil Aviation Safety Regulations 1998 Part 61.

You will receive feedback directly from the flight examiner immediately after the flight test. You are required to certify the corresponding electronic training record prior to subsequent flights.

This is a pass/fail assessment. However, failure to attempt or pass this assessment will result in the award of a UF grade for your course, irrespective of the final mark.

Course Learning Outcomes

- CLO1 : Describe the systems and procedures that are used in multi-engine aeroplanes, and aeroplanes fitted with CSU, G1000, retractable undercarriage and conventional navigation aids.
- CLO2 : Apply principles of single pilot threat and error management to the conduct of Instrument Flight Rules (IFR) flying operations by day and night.

- CLO3 : Explain the procedures and structures associated with a typical organisation that holds an AOC authorising commercial flying operations under the Instrument Flight Rules.
- CLO4 : Recall and describe the knowledge that underpins private and commercial flying operations by day and night under the Instrument Flight Rules.
- CLO5 : Demonstrate competence measured against relevant professional standards for general and cross-country flying.

Detailed Assessment Description

Sequences assessed during the flight test can be found on the Civil Aviation Safety Authority (CASA) website, detailed on form number 61-1503, titled- Instrument rating flight test.

Assignment submission Turnitin type

This is not a Turnitin assignment

Hurdle rules

Failure to successfully pass the instrument flight test will result in a UF grade for AVIG5914.

General Assessment Information

Ground theory and flying tasks, criteria and standards are specified in the UNSW Operations Manual, Part E9.
Your final mark for AVIG 5914 will be determined using the weightings shown above for each assessment task.
Assessment task 2 is a pass/fail assessment and does not attract any weighting for the final mark.
Assessment tasks 1 and 2 are essential components of the course. Failure to attempt or pass both assessments will result in the award of a UF grade for AVIG 5914, irrespective of the final mark.

Grading Basis

Standard

Course Schedule

Attendance Requirements

Attendance at all scheduled ground and flight lessons is required, Failure to attend an assigned booking slot will rneed an acceptable reason such as a medical certificate to explain the absence.

General Schedule Information

This course consists of 27 simulated and airborne flying training exercises as described in the UNSW Operations Manual.

Because the airborne flying cannot be scheduled well in advance due to weather, aeroplane availability and student performance, an accurate weekly description of activities is not possible. Students can expect to be scheduled for a simulated or airborne flying training exercise every two days on average.

Course Resources

Prescribed Resources

An initial issue of DAP East and West and a comprehensive series of printed notes will be issued to students for instrument rating theory.

The text for instrument rating will be issued directly to students before the commencement of IFR theory. The text for instrument rating theory is:

- Instrument Rating, Aviation Theory Centre, (Sith Edition) March 2022

Recommended Resources

UNSW Operations Manual, IFR training manual, PA44 AFM and QRH and CASA Part 61 Manual of Standards.

Additional Costs

A breakdown of posible additional direct flying costs can be found in the Graduate Diploma in Flying Procedures Manual V11.2 June 2023. A copy of this manual can be downloaded from the FOU intranet at Library | School of Aviation (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
Convenor	Rodney Hyde		Flying Operations Unit	02 9791 3047	By appointment	Yes	Yes
Head lecturer	Jeremy Andrews		Flying Operations Unit	02 9791 3047	By appointment	No	No
Lecturer	Barry Ellis		Flying Operations Unit	02 9791 3047	By appointment	No	No
	Martin Jamieson		Flying Operations Unit	02 9791 3047	By appointment	No	No
	Neil Windle		Flying Operations Unit	02 9791 3047	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.

Academic Honesty and Plagarism

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)