UNSW Course Outline

AVIA3401 Aviation Safety and Resource Management - 2024

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General Course Information

Course Code : AVIA3401
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

The success of safe operations within aviation relies as much on the individual performing their roles as on the way they interact with others. This course, therefore, examines the interaction of people in a group or set of groups and examines how this interaction affects the performance of

the system, and the relative success of the operations. Theories relating to group-based behaviour and performance, including social and cultural aspects, organisational and safety culture are examined. The application of these theories is discussed in context to high-profile aviation incidents and accidents, and explored through the use of lectures, interactive tutorials, case-study readings, summative activities, and assessments relating to real-world application.

Course Aims

The aim of this course is to help students develop an understanding of safety concepts, safety management systems, and the interaction of people in a group and organisational setting. The course also aims to examine how this interaction affects the performance of the aviation system, particularly in terms of safety. Theories relating to group-based behaviour and performance, including social and cultural aspects are examined, along with aspects of safety and safety management systems. The application of these theories is discussed in context to high-profile aviation incidents and accidents.

Relationship to Other Courses

This course builds on the content (and acquired knowledge) from courses such as AVIA1321 (discontinued in 2024) and AVIA1401 to provide students with detailed knowledge about how individuals behave in groups, and processes and systems in place in aviation to ensure operational safety.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Describe how individuals behave in groups with reference to associated theories.
CLO2 : Explain how group influences affect individual behaviour with reference to associated theories.
CLO3 : Explain the impact of individual and group influences on safety.
CLO4 : Recall safety culture and associated theories at a detailed level when considering various aviation scenarios.
CLO5 : Discuss safety management systems, and their application in an aviation context.
CLO6 : Apply advanced learning, writing and communication skills appropriately for a variety of contexts and audiences.

Course Learning Outcomes	Assessment Item
CLO1 : Describe how individuals behave in groups with reference to associated theories.	• Written Individual Project • Panel Discussion Group Project • Final Examination
CLO2 : Explain how group influences affect individual behaviour with reference to associated theories.	• Written Individual Project • Panel Discussion Group Project • Final Examination
CLO3 : Explain the impact of individual and group influences on safety.	• Final Examination
CLO4 : Recall safety culture and associated theories at a detailed level when considering various aviation scenarios.	• Written Individual Project • Panel Discussion Group Project • Final Examination
CLO5 : Discuss safety management systems, and their application in an aviation context.	• Written Individual Project • Panel Discussion Group Project • Final Examination
CLO6 : Apply advanced learning, writing and communication skills appropriately for a variety of contexts and audiences.	• Written Individual Project • Panel Discussion Group Project • Final Examination

Learning and Teaching Technologies

Moodle - Learning Management System

Learning and Teaching in this course

Teaching comprises a series of lectures, tutorials, reading and accompanying questions (with answers). The lecturer aims to provide students in advance of each lecture, the lecture material, readings and associated questions. This material will be available on Moodle. During the tutorial,

the readings will be covered in addition to at least one exercise which is intended to reinforce the material covered in the lecture. Each tutorial is intended to be interactive, where the tutor will challenge the students, in terms of their knowledge and belief about the topic under examination. **Hence, your participation as a student is vital**.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Written Individual Project Assessment Format: Individual	30%	Start Date: Not Applicable Due Date: 07/03/2024 10:00 AM
Panel Discussion Group Project Assessment Format: Group	20%	Start Date: Not Applicable Due Date: Week 10: 15 April - 21 April
Final Examination Assessment Format: Individual	50%	Start Date: Not Applicable Due Date: UNSW Examination Period

Assessment Details
Written Individual Project

Assessment Overview

You are required to find a recent incident or accident relating to human factors in transportation and themes covered in the course, and to submit a maximum 1500-word written assignment on your chosen incident or accident.

Details of the assignment will be released at the start of the Term. The assignment is due in Week 4. Written feedback will be provided within 10 working days after the submission deadline.

Course Learning Outcomes

- CLO1 : Describe how individuals behave in groups with reference to associated theories.
- CLO2 : Explain how group influences affect individual behaviour with reference to associated theories.
- CLO4 : Recall safety culture and associated theories at a detailed level when considering various aviation scenarios.
- CLO5 : Discuss safety management systems, and their application in an aviation context.
- CLO6 : Apply advanced learning, writing and communication skills appropriately for a variety of contexts and audiences.

Submission notes

See Assessment Overview in Moodle.

See Assessment Overview in Moodle.

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Panel Discussion Group Project

Assessment Overview

In a group of 5-6 members, you will be required to work cohesively to create a coherent and comprehensive panel discussion on a nominated topic relating to aviation safety.

You will be allocated into your group after Week 4 and assessment details will also be released at this time.

The panel discussion will last for 6 minutes and be conducted face-to-face in Week 10 during your scheduled class time.

Each group will be required to nominate their own theme, where no groups are permitted to have the same theme. The lecturer in charge will approve each theme. Each group will be required to provide minutes of each meeting during class, immediately before the Panel Discussion.

In addition, students will be required to undertake a hurdle task, and provide a peer evaluation for each student within their respective group in the form of a mark based on a rubric and a written comment. This will be submitted via Moodle in Week 10. The evaluation is intended to provide all students with an opportunity to share feedback on the process and ensure that the distribution of individual marks is fair and equitable.

Your group will be assessed on their ability to research and communicate the nominated topic in a way that is appropriate to the assessment format, ensuring a comprehensive and variety of perspectives are considered. The panel discussion should be educational, entertaining, and informative. Each student is required to sit on the panel and assume the role of a key industry expert, providing key insights related to the nominated theme. It is expected that each group member's chosen industry role is different, and that the respective member provides a perspective related to that role during the discussion.

Each group will receive written feedback within 10 working days of Panel Discussion.

Course Learning Outcomes

- CLO1 : Describe how individuals behave in groups with reference to associated theories.
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- CLO5 : Discuss safety management systems, and their application in an aviation context.
- CLO6 : Apply advanced learning, writing and communication skills appropriately for a variety of contexts and audiences.

Submission notes

See Assessment Overview in Moodle.

Assessment information

See Assessment Overview in Moodle.

Assignment submission Turnitin type

Not Applicable

Final Examination

Assessment Overview

The final examination is held during the University examination period and is designed to test your knowledge of all topics covered throughout the term. The examination format consists of both multiple-choice questions and essay style response questions. The final examination is 2 hours duration.

Feedback is available through inquiry with the course convenor.

Course Learning Outcomes

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Submission notes

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<u>Assessment information</u>

See Assessment Overview in Moodle.

<u>Assignment submission Turnitin type</u>

Not Applicable

General Assessment Information

UNSW Aviation's decision for Short Extension Policy

The School of Aviation has carefully reviewed its range of assignments and projects to determine their suitability for automatic short extensions as set out by the UNSW Short Extension Policy. After careful consideration of our course offerings and our current structure, we have determined that our current deadline structures already accommodate the possibility of unexpected circumstances that may lead students to require additional days for submission. **Consequently, the School of Aviation has decided to not adopt the Short Extension provision for all its courses and has reassured that flexibility is integrated into our assessment deadlines.** The decision is subject to revision in response to the introduction of new course offerings. Students may still apply for Special Consideration via the usual procedures.

<u>Grading Basis</u>

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 12 February - 18 February	Lecture	Introduction - Aviation Safety and Non-Technical Skills
Week 2 : 19 February - 25 February	Lecture	Safety Management Systems
Week 3 : 26 February - 3 March	Lecture	Culture and Performance
Week 4 : 4 March - 10 March	Lecture	Communication and Teamwork
Week 5 : 11 March - 17 March	Lecture	Social Influence and Group Decision-Making
Week 6 : 18 March - 24 March	Other	Flexibility Week
Week 7 : 25 March - 31 March	Lecture	Non-Technical Skills and Training
Week 8 : 1 April - 7 April	Lecture	Safety Assurance
Week 9 : 8 April - 14 April	Lecture	Organisational Accidents
Week 10 : 15 April - 21 April	Blended	Revision plus Group Presentations

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

UNSW Aviation's decision to not release Lecture Recordings:

The School of Aviation prides itself on offering education that supports students in their personalised learning journey. This involves providing opportunities for students to engage with academics and key aviation experts to identify and address learning gaps, develop core skills and knowledge, and foster an environment of collaboration and meaningful discussion with the UNSW Aviation community. To support this vision, UNSW Aviation has decided to require students to attend all synchronous lectures (in-person or online) and not release class recordings to the student cohort. If students cannot attend a class and require learning support due to unforeseen circumstances, they should contact their Course Coordinator or Program Coordinator to discuss options for support and making up for missed class time.

Course Resources

Prescribed Resources

Lawson, A., Rodrigues, C. C., Malmquist, S., Braithwaite, G., & Cusick, S. K. (2023). Commercial Aviation Safety. New York, NY: McGraw Hill.

Course Evaluation and Development

UNSW Aviation highly value student feedback as a way to constantly improve course offerings, teaching excellence and the student experience. In AVIA3401, students are provided with opportunities, both informal feedback, via direct correspondence with the course convenor, forums, and survey questions in the Reflect and Review activities; and formal feedback, via myExperience Surveys. The availability of this feedback creates a culture of continuous improvement by identifying, responding to, and acting on student feedback.

The course survey will open towards the end of Term. Students are encouraged to participate in the survey via Moodle, myUNSW, or through the direct myExperience link.

Please provide constructive feedback and focus on your learning experience in relation to the course material. While the survey is confidential, it is not anonymous. Comments that breach the Student Code of Conduct, that are hurtful, racist, sexist or ill-natured, may lead to disciplinary action.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Brett Molesworth		Kensington campus		Post tutorial (Thursday 1400-1500) or by arrangement	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 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

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