UNSW Course Outline

AVIA5040 Safety Risk Management - 2024

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General Course Information

Course Code : AVIA5040
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 : Online
Delivery Format : Standard
Delivery Location : Kensington
Campus : Sydney
Study Level : Postgraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

This course provides an introduction to safety risk management including models of incident causation, the risk management framework, and concepts of injury management and hazard control. Models for managing workplace safety are introduced as these underlie the

management systems for many other risks.

Students will be asked to apply risk management techniques to a range of hazards and hazardous scenarios, evaluate issues in their measurement, monitoring and risk management, and will have the opportunity to share and discuss their own experiences of managing risks. Key issues in human performance affecting the practice of modern risk management will also be considered.

Students will evaluate conceptual issues surrounding a range of hazards where human interaction with systems is paramount, and consider their measurement, monitoring, and risk management strategies. Commonly employed hazard control mechanisms, which are relevant to human performance will also be evaluated. Students will be asked to apply risk management techniques to these hazards, and will have the opportunity to share and discuss their own experiences of managing risks.

Course Aims

The course aims to provide an introduction to issues associated with risk management of safety incidents in high reliability organisations. This course integrates theoretical issues (such as qualitative and quantitative risk management, and models of accidents causation) with practice of identifying contributing factors and planning control strategies. This course aims to develop students' appreciation of the importance of evaluating risk management and accident models before embarking on a risk management process. In addition this course aims to provide students with the skills to find and evaluate information about particular hazards and risk management models, and help use such information to better apply safety risk management paradigms.

Relationship to Other Courses

Exclusions: AVIA9101 and AVIA9201

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Describe and evaluate fundamental issues in safety risk management (such as safety culture, safety management systems and risk management frameworks)
CLO2 : Apply the risk management process, both qualitatively and quantitatively, as well as other processes in safety risk management
CLO3 : Apply and evaluate various models of accident causation
CLO4 : Locate, evaluate and use relevant scholarly sources of information related to course topics

Course Learning Outcomes	Assessment Item
CLO1 : Describe and evaluate fundamental issues in safety risk management (such as safety culture, safety management systems and risk management frameworks)	• Scenario Risk Assessment Presentation
CLO2 : Apply the risk management process, both qualitatively and quantitatively, as well as other processes in safety risk management	• Short Answer Questions • Scenario Risk Assessment Presentation
CLO3 : Apply and evaluate various models of accident causation	• Short Answer Questions • Scenario Risk Assessment Presentation
CLO4 : Locate, evaluate and use relevant scholarly sources of information related to course topics	• Literature Evaluation Assignment

Learning and Teaching Technologies

Moodle - Learning Management System

Learning and Teaching in this course

Several different methods are used in the course to assist in achieving student learning outcomes. These include the use of case studies and examples from various industries, and the discussion of class members' experiences and reflections on course materials and readings. Exercises are included in the units to allow students to develop, and check their understanding, and to discuss issues with others in the course. Research examples are used where appropriate to demonstrate content and build an understanding of scientific literature. This should help students to consult and use scientific literature for other purposes (eg., future courses, work situations). Readings and other material are provided to assist students to evaluate different perspectives, and to provide background theoretical material.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Literature Evaluation Assignment Assessment Format: Individual	30%	Start Date: Not Applicable Due Date: 21/6/24 11:59PM
Scenario Risk Assessment Presentation Assessment Format: Individual	40%	Start Date: Not Applicable Due Date: 19/7/24 11.59PM
Short Answer Questions Assessment Format: Individual	30%	Start Date: Not Applicable Due Date: 2/08/24 11:59PM

Assessment Details

Literature Evaluation Assignment

Assessment Overview

This assignment requires students to search for articles in UNSW Library databases, and report on what they found and how they found them. The articles will be related to a list of topics provided. Students will need to write 1) an evaluation of their results for relevance, and 2) write a summary (up to 1000 words) on one of the topics. Feedback will be provided by written comments in 10 business days after the deadline. The assignment will be due before the census date.

Course Learning Outcomes

- CLO4 : Locate, evaluate and use relevant scholarly sources of information related to course topics

Assessment Length

1000 words

Assignment submission Turnitin type

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

Scenario Risk Assessment Presentation

Assessment Overview

Students will be asked to locate and analyse an incident using analysis models from the course and discuss examples from relevant literature. The incident may be a near-miss, and could be based on their own workplace experiences. Students will describe the main features of the incident, analyse it using a range of incident models and compare and contrast the features of

these models, using scholarly resources to assist. The report will be in the form of a 4 minute video. Feedback will be provided by written comments within 10 business days of the deadline. The assignment will be due usually around Week 7-8.

Course Learning Outcomes

- CLO1 : Describe and evaluate fundamental issues in safety risk management (such as safety culture, safety management systems and risk management frameworks)
- CLO2 : Apply the risk management process, both qualitatively and quantitatively, as well as other processes in safety risk management
- CLO3 : Apply and evaluate various models of accident causation

Assessment Length

4 minute video

Assignment submission Turnitin type

This is not a Turnitin assignment

Short Answer Questions

Assessment Overview

Students will answer a series of questions where course topics will be applied to scenarios with short-form answers. (300-500 words). Students will be able to choose to respond to 2 questions from a list of 6-8 questions. Feedback will be provided to students within 10 business days after submission deadline. The assignment will be due in the last week of the course.

Course Learning Outcomes

- CLO2 : Apply the risk management process, both qualitatively and quantitatively, as well as other processes in safety risk management
- CLO3 : Apply and evaluate various models of accident causation

Assessment Length

600-1000 words

Assignment submission Turnitin type

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

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.

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 27 May - 2 June	Topic	Intro to WHS and Risk Management
Week 2 : 3 June - 9 June	Topic	OHSMS and safety culture
Week 3 : 10 June - 16 June	Topic	WHS Law regulation and Standards
Week 4 : 17 June - 23 June	Topic	Accident theory and Investigation
Week 5 : 24 June - 30 June	Topic	Systems safety and managing safety risks
Week 6 : 1 July - 7 July	Topic	Identifying risks
Week 7 : 8 July - 14 July	Topic	Risk analysis and evaluation
Week 8 : 15 July - 21 July	Topic	Systems safety and managing risks in complex systems
Week 9 : 22 July - 28 July	Topic	Risk perception
Week 10 : 29 July - 4 August	Topic	Psychosocial risks

Attendance Requirements

Not Applicable - as no class attendance is required

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

Readings will be provided along with each unit via the UNSW Library Leganto system, which collates all relevant reading materials and makes them available online. This will be linked on the Moodle site (Course Readings). There are no required textbooks for this course, but students must access and use the readings as listed on the Course Readings link.

Course Evaluation and Development

Students enrolled in AVIA5040 are given the opportunity to actively engage in the course as collaborators and drivers of their learning experience. In addition to the MyExperience survey, opportunities for informal and formal feedback via Moodle feedback surveys and Blackboard Collaborate sessions are provided to students throughout the course, as a way for the convenor to both proactively receive and respond to student enquiries in real-time where possible, as well as implement improvements in future iterations of the course

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Carlo Capone cchia				via email and/or Moodle forums	No	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

Email:

aviation@unsw.edu.au

Telephone:

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

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