AINV13002 *Human Factors Investigation*
Term 2 - 2017

Profile information current as at 07/05/2024 11:52 pm

All details in this unit profile for AINV13002 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

This unit will provide students with the opportunity to build upon their learning in Human Factors (HF) through the application of contemporary HF investigation tools and techniques to an accident case study. Students will also have the opportunity to develop their ability to interpret organisational factors and examine the nature of safety culture factors evident in the causation of major disasters.

Details

Career Level: *Undergraduate*
Unit Level: *Level 3*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites

There are no requisites for this unit.
Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the Assessment Policy and Procedure (Higher Education Coursework).

Offerings For Term 2 - 2017

- Distance

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website

This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

Regional Campuses

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

Metropolitan Campuses

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Group Discussion**
Weighting: Pass/Fail
2. **Written Assessment**
Weighting: 50%
3. **Written Assessment**
Weighting: 50%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the University's Grades and Results Policy for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the CQUniversity Policy site.
You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the CQUniversity Policy site.

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Student feedback

Feedback

'Would be better if it (Moodle) were to be segmented into weeks'

Recommendation

Change Moodle from social format to weekly learning tabs.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Analyse accident case study through the application of contemporary human factors investigation tools and techniques.
2. Derive and interpret organisational factors evident in the causation of major disasters by employing organisational factor analysis.
3. Examine the nature and contribution of safety culture to accident causation.
4. Employ effective communication strategies appropriate to human factors investigations.
5. Demonstrate reflective skills appropriate to the development of the graduating practitioner.

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level   ○ Introductory Level   ○ Intermediate Level   ● Graduate Level   ○ Professional Level   ○ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Group Discussion - 0%				●	●
2 - Written Assessment - 50%	●			●	●
3 - Written Assessment - 50%		●	●	●	●

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
1 - Communication	●	●	●	●	
2 - Problem Solving	●	●	●		
3 - Critical Thinking	●	●	●	●	●

Graduate Attributes	Learning Outcomes				
	1	**2**	**3**	**4**	**5**
4 - Information Literacy	•	•	•	•	
5 - Team Work					
6 - Information Technology Competence	•			•	
7 - Cross Cultural Competence	•	•	•		
8 - Ethical practice	•	•	•		•
9 - Social Innovation					
10 - Aboriginal and Torres Strait Islander Cultures					

Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1 - Group Discussion - 0%	•		•	•		•		•		
2 - Written Assessment - 50%	•	•	•	•		•	•	•		
3 - Written Assessment - 50%	•	•	•	•		•	•	•		

Textbooks and Resources

Textbooks

There are no required textbooks.

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

Referencing Style

All submissions for this unit must use the referencing style: Harvard (author-date)
For further information, see the Assessment Tasks.

Teaching Contacts

Peter Marshall Unit Coordinator
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Schedule

Week 1 - 10 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Introduction: Getting to know you, moodle & this unit		

Week 2 - 17 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Module 1: Human factors & accident causation		

Week 3 - 24 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic

Week 4 - 31 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic

Week 5 - 07 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic

Vacation Week - 14 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 21 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
Module 2: Human factors investigation methods		

Week 7 - 28 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic

Week 8 - 04 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic

Week 9 - 11 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
		Annotated mindmap & bibliography Due: Week 9 Monday (11 Sept 2017) 10:00 am AEST

Week 10 - 18 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic

Week 11 - 25 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Module 3: Bringing it altogether to successfully investigate human factors post accident		

Week 12 - 02 Oct 2017

Module/Topic	Chapter	Events and Submissions/Topic
Review & reflection		**HFI Problem Solving** Due: Week 12 Monday (2 Oct 2017) 10:00 am AEST

Review/Exam Week - 09 Oct 2017

Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Group Discussion

Assessment Type
Group Discussion

Task Description
Students will be expected to contribute to the HFI community of practice.

Assessment Due Date

Through out the term

Return Date to Students

Comment in moodle only

Weighting
Pass/Fail

Minimum mark or grade
A pass grade is required for successfgul completion of AINV13002

Assessment Criteria
Engagement as a responsible member of the learning community.
Engagement is a pass/fail criteria.
Successful engagement requirements include:
1. your personal introduction,
2. timely posts to in the class Moodle Discussion of your own work for Assessment 2 and Assessment 3 for peer feedback
3. timely and effective feedback support in the in the class Moodle Discussion for a minimum of two other students in both Assessment 2 and Assessment 3
4. class participation, as evidenced by by your contribution to the HFI community of practice in the class Moodle Discussion.

Referencing Style

- Harvard (author-date)

Submission
Online

Learning Outcomes Assessed

- Employ effective communication strategies appropriate to human factors investigations.
- Demonstrate reflective skills appropriate to the development of the graduating practitioner.

Graduate Attributes

- Communication
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice

2 Annotated mindmap & bibliography

Assessment Type
Written Assessment

Task Description
For this task you will be required to review the literature and complete a preamble (context), an annotated mindmap and bibliography based around a specific case study.
Your submissions should evidence

- What happened (preamble)
- Why it happened (preamble)
- Design failures and system life cycle as related to human factors issues (annotated mind map)
- Issues and findings related to physical, cognitive and organisational factors (annotated mind map)
- Human factors investigation tools recommended to investigate the issues including the strengths and weaknesses of each tool for purpose (mind map & bibliography)

The 'whys' above should draw on evidence in the report AND in the literature (i.e. bibliographies). It should include formal 'in text' referencing in the mind map and include a separate reference list.

You are encouraged to use mind mapping software e.g.'FreeMind', **http://freemind.sourceforge.net/wiki/index.php/Main_Page** but you should upload your submission as a pdf.

This task will have a self and peer review component.

Further details about this task will be provided through moodle.

Assessment Due Date
Week 9 Monday (11 Sept 2017) 10:00 am AEST

Return Date to Students
Week 11 Friday (29 Sept 2017)

Weighting
50%

Assessment Criteria
As a general rule assessment criteria for all assessment items include:

1. (90%) Content—includes the accuracy, relevance and application of key concepts, analysis, argument, language and grammar used in answering a question or report (see marking criteria for individual requirements).

2. (10%) References—includes the provision of a reference list and the application of the Harvard style for referencing information, data, tables or images sourced for the assignment or report.

Specific assessment criteria for each assessment piece will be provided through Moodle.

Referencing Style

- Harvard (author-date)

Submission
Online

Learning Outcomes Assessed

- Analyse accident case study through the application of contemporary human factors investigation tools and techniques.
- Employ effective communication strategies appropriate to human factors investigations.
- Demonstrate reflective skills appropriate to the development of the graduating practitioner.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

3 HFI Problem Solving

Assessment Type
Written Assessment

Task Description
This problem solving activity will extend the work done in Assessment 2.

You are not limited to a report format for these assessments, you may present your work in any format that suits your needs.

Complete both Part A and Part B:

PART A
There are three options available to complete Part A of this assignment, depending on your own circumstances and interests.

You are required to:

1. Fully describe the event (this can be taken from assessment 2); and
2. Identify significant components of the system/s relevant to the event (this can be taken from assessment 2); and
3. Analyse and research the potential human factors issues related to the event (this can be taken from assessment 2); and
4. Apply one of the following three Options:

OPTION 1: Apply HFACS to your event (Give specific attention to the topics studied in Module 1 in relation to your accident).

       a. Critique HFACS, in terms of its

- usability;
- value in investigating human factors issues; and
- usefulness with regard to learning from the event to prevent any future event.

       b. Discuss any recommendations you would make to the authors of HFACS to address any limitations with the current tool.

OPTION 2: Consider the tools that you found that might be suitable for investigating your event and the strengths and limitations of each tool. (Give specific attention to the topics studied in Module 1 in relation to your accident).

       a. Create a tool that would be useful to investigate the HF issues in your event (this could be a hybrid of existing tools)

       b. Justify the value of each element of your tool.

OPTION 3: Negotiate an alternate learning experience (that will derive a greater benefit to you or your organisation) that could be evaluated using the same assessment evaluation criteria used for the other options for this assignment.

PART B
… and in the end … some of the most important reflections of all:

1. Evaluate the contribution that organisational factors and safety culture had on accident causation in relation to your event then reflect on the genesis of these HF issues and any shifts of understanding that you may have had through study of systems/HF design in this unit; and
2. Reflect on any investigations that you (or others) have conducted previously and share any new insights ('ah ha' moments) that you have had this term with regard to investigating the genesis of any HF issues as causal factors; and
3. Reflect on your professional practice into the future and share any planned changes to your professional practice resulting from study of human factors investigation.

Assessment Due Date
Week 12 Monday (2 Oct 2017) 10:00 am AEST

Return Date to Students
Exam Week Friday (20 Oct 2017)

Weighting
50%

Assessment Criteria
As a general rule assessment criteria for all assessment items include:

1. (90%) Content—includes the accuracy, relevance and application of key concepts, analysis, argument, language and grammar used in answering a question or report (see marking criteria for individual requirements).
2. (10%) References—includes the provision of a reference list and the application of the Harvard style for referencing information, data, tables or images sourced for the assignment or report.

Specific assessment criteria for each assessment piece will be provided through Moodle.

Referencing Style

- Harvard (author-date)

Submission
Online

Learning Outcomes Assessed

- Derive and interpret organisational factors evident in the causation of major disasters by employing organisational factor analysis.
- Examine the nature and contribution of safety culture to accident causation.
- Employ effective communication strategies appropriate to human factors investigations.
- Demonstrate reflective skills appropriate to the development of the graduating practitioner.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the **Student Academic Integrity Policy and Procedure**. This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?
A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?
A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?
For academic advice and guidance, the Academic Learning Centre (ALC) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?

Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own

Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)

Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem