

Profile information current as at 20/05/2024 06:39 am

All details in this unit profile for AINV11001 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

Students are provided with the opportunity to become a 'real world' investigator during this foundation unit. Through engagement with peers, lecturing staff and the socio-technical world around them, students will develop base skills in investigation ethics and philosophy, evidence-based practice in investigation forensics, and begin to understand the nature of accidents and disasters, and latent pathogens in socio-technical systems.

# Details

Career Level: Undergraduate

Unit Level: Level 1 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 <a href="Assessment Policy and Procedure (Higher Education Coursework)">Assessment Policy and Procedure (Higher Education Coursework)</a>.

# Offerings For Term 1 - 2024

• Online

# 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: 10% 2. **Portfolio** Weighting: 30%

3. Written Assessment

Weighting: 30%

4. Written Assessment

Weighting: 30%

# 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 <u>University's Grades and Results Policy</u> 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 SUTE Comments

#### **Feedback**

The learning outcomes from each week were made clear with logical progression week to week building knowledge which lined up with the assessment tasks.

#### Recommendation

It is recommended to keep the delivery of learning material as per the current unit schedule and the timing of the assessment items.

## Feedback from SUTE Comments

### **Feedback**

Students liked the real-world investigation examples and the learning on the different investigation tools and templates.

#### Recommendation

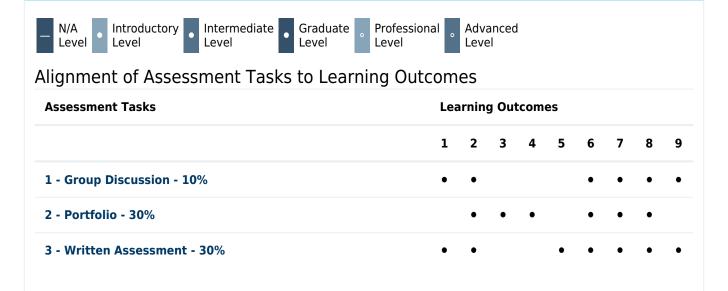
It is recommended to keep the real-world investigation examples and the exposure that students receive to the different and more contemporary investigation tools and templates.

# **Unit Learning Outcomes**

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

- 1. Recognise that events can be analysed and interpreted in different contexts (e.g. disciplinary, socio-technical, cultural).
- 2. Construct an argument based on classic logical form.
- 3. Explain the principles of evidence-based practice.
- 4. Describe the role of investigation in socio-technical contexts.
- 5. Discuss the ethical implications of observed events.
- 6. Recognise basic accident pathogen.
- 7. Conduct a basic analysis of accident causation.
- 8. Employ effective communication strategies appropriate to real world investigations.
- 9. Demonstrate reflective skills appropriate to the development of the beginning practitioner.

# Alignment of Learning Outcomes, Assessment and Graduate Attributes



Assessment Tasks		Learning Outcomes								
		1	2	3	4	5	6	7	8	9
4 - Written Assessment - 30%							•	•	•	
Alignment of Graduate Attributes to Learning Outcomes										
Graduate Attributes	ı	Learning Outcomes								
	,	1	2	3	4	5	6	7	8	9
1 - Communication		•	•	•	•	•		•	•	•
2 - Problem Solving					•		•			
3 - Critical Thinking		•	•	•	•	•	•			•
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	Gra	Graduate Attributes								
	1	2	3	4	5	6	7	8	9	10
1 - Group Discussion - 10%	•	•	•	•	•	•	•	•		
2 - Portfolio - 30%	٠	•	•	•		٠				
3 - Written Assessment - 30%	٠	•	٠	٠		٠	•	•		
4 - Written Assessment - 30%		•								

# 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)
- (e-book) Essential Logic: Basic Reasoning Skills for the 21st Century (link will be made available within moodle at the start of term)

# Referencing Style

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

# **Teaching Contacts**

Karen Klockner Unit Coordinator

k.klockner@cqu.edu.au

# Schedule

Week 1 - 04 Mar 2024		
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>
Overview of unit Introduction to Moodle, the unit, concepts and the assessments	All readings are supplied via the Moodle site	Lecture
Week 2 - 11 Mar 2024		
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>
Module 1 - The Reflective Investigator Gibbs Model of Reflection The 5 Whys		Lecture
Week 3 - 18 Mar 2024		
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>
Module 1 - The Reflective Investigator		Lecture
Complex Sociotechnical Systems of Work		<b>Moodle Reflection</b> Due: Week 3 Friday (22 Mar 2024) 11:45 pm AEST
Week 4 - 25 Mar 2024		
Module/Topic	Chapter	Events and Submissions/Topic

Module 2 - Identifying Accident **Contributing Factors** 

The Contributing Factors Framework -Rail Safety (CFF-RS)

Contributing Factors Framework - Rail Safety (2009) Manual Contributing Factors Framework - Rail Lecture

Safety (2009) Framework

Week 5 - 01 Apr 2024

Module/Topic

Module 2 - Identifying Accident **Contributing Factors** 

The Contributing Factors Framework -Rail Safety (CFF-RS)

Chapter

Contributing Factors Framework - Rail Safety (2009) Manual

Contributing Factors Framework - Rail Safety (2009) Framework

Lecture

The Reflective Investigator Due: Week 5 Friday (5 Apr 2024) 11:45 pm

**Events and Submissions/Topic** 

**AEST** 

Vacation Week - 08 Apr 2024

Module/Topic

Chapter

**Events and Submissions/Topic** 

Week 6 - 15 Apr 2024

Module/Topic

Chapter

**Events and Submissions/Topic** 

Module 3 - Investigation Methods

and Models AcciMap

Lecture

Week 7 - 22 Apr 2024

Module/Topic

Chapter

**Events and Submissions/Topic** 

Module 3 - Investigation Methods and Models

AcciMap Fishbone Bow Tie

Lecture

Lecture

Week 8 - 29 Apr 2024

Module/Topic

Chapter

**Events and Submissions/Topic** 

Module 4 - Accident Pathogens & Causation

The Contributing Factors Framework -Maritime Safety (CFF-MS)

Contributing Factors Framework -Maritime Safety (2021) Paper Contributing Factors Framework -Maritime Safety (2021) Framework

**Contributing Factors Framework -**Rail Safety and AcciMap Due: Week 8 Friday (3 May 2024) 11:45 pm AEST

Week 9 - 06 May 2024

Module/Topic

Chapter

**Events and Submissions/Topic** 

Module 4 - Accident Pathogens & Causation

The Contributing Factors Framework -Maritime Safety (CFF-MS)

Contributing Factors Framework -Maritime Safety (2021) Paper Contributing Factors Framework -Maritime Safety (2021) Framework

Lecture

Week 10 - 13 May 2024

Module/Topic

Chapter

**Events and Submissions/Topic** 

**Module 5 - Accident Investigation** 

Reports

Reflecting on Investigation Reports

Lecture

Week 11 - 20 May 2024

Module/Topic

Chapter

**Events and Submissions/Topic** 

Module 5 - Investigation Reports Evidence in Investigation		Lecture
Week 12 - 27 May 2024		
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>
		Lecture
Unit Review - Assessment Help		Contributing Factor Framework - Maritime Safety and AcciMap Due: Week 12 Friday (31 May 2024) 11:45 pm AEST
Review/Exam Week - 03 Jun 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Exam Week - 10 Jun 2024		
Module/Topic	Chapter	Events and Submissions/Topic

# **Assessment Tasks**

# 1 Moodle Reflection

# **Assessment Type**

**Group Discussion** 

## **Task Description**

In this task students will gain an understanding of the different backgrounds, contexts and cultures from which investigators come from, as well as the differences in skills and knowledge which each person brings to their real-world experience. Firstly, you are required read generic Accident Investigation Job Role via the Assessment 1 details on the Moodle site and then reflect on your own capabilities to do this role in the real world.

As a first-year student it is also very important that you begin to get to know your peers, some of whom you will be studying with for the next few years and develop a community of practice within the Safety Sciences. Therefore, you should know how to connect to your peers via the Moodle site and be familiar with how to network with others.

You are therefore required to log in to the Moodle site and complete the following activity by the end of Week 3 of term:

# **MRA - Moodle Reflection Activity**

Find the 'Learning Community Tile' and then the 'General Discussion' forum or access the 'General Discussion' forum from the Information tab at the top of the Moodle site.

You are then required to post a discussion to the class cohort using the 'General Discussion' forum. This must be a new post that shows your reflection of yourself as an accident investigator.

You must reflect on and discuss the following information:

- (a) Your **knowledge and education** related to being an accident investigator.
- (b) Your **skills and experience** as they relate to being an accident investigator.
- (c) Your **personal traits and job fit factors** as they relate to an accident investigator.
- (d) As an accident investigation student, what you expect to learn in this unit in order to fill any identified gaps in your capabilities for undertaking an accident investigation role.

## **Assessment Due Date**

Week 3 Friday (22 Mar 2024) 11:45 pm AEST

### **Return Date to Students**

Week 5 Friday (5 Apr 2024)

# Weighting

10%

## **Assessment Criteria**

This assessment will be marked online within the Moodle environment using the tracking statistics available to lecturers. Therefore, you DO NOT have to upload anything to the assessment area as the lecturer will mark your discussion post

from the General Discussion area. The key assessment criteria used will be your 'genuine participation' within the learning environment.

Your investigation of yourself via your General Discussion post will be marked out of 10 as follows: -

- (a) Your knowledge and education related to being an accident investigator (2 marks)
- (b) Your skills and experience as they relate to being an accident investigator (2 marks)
- (c) Your personal traits and job fit factors as they relate to an accident investigator (2 marks)
- (d) As an accident investigation student, what you expect to learn in this unit in order to fill any identified gaps in your capabilities for undertaking an accident investigation role (4 marks)

## **Referencing Style**

• Harvard (author-date)

#### **Submission**

Online

#### **Submission Instructions**

You do not have to submit anything in the assessment upload area, your participation will be graded from your posts in the discussion forum.

# **Learning Outcomes Assessed**

- Recognise that events can be analysed and interpreted in different contexts (e.g. disciplinary, socio-technical, cultural).
- Construct an argument based on classic logical form.
- Recognise basic accident pathogen.
- Conduct a basic analysis of accident causation.
- Employ effective communication strategies appropriate to real world investigations.
- Demonstrate reflective skills appropriate to the development of the beginning practitioner.

#### **Graduate Attributes**

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

# 2 The Reflective Investigator

# **Assessment Type**

Portfolio

# **Task Description**

Task Description

In this assessment you will be asked to reflect and investigate an incident or event in your own life. You should pick an event on which you can reflect using the Gibbs Model of Reflection and a 5 Why's analysis.

The tasks include 3 steps:

- Completing a Gibbs Model of Reflection;
- Completing a 5 Why's Fish Bone Analysis;
- Comparing the Gibbs Model of Reflection to the 5 Why's Analysis.

**Step 1** - Reflect and write about something significant that has happened in your life (it might be something related to university, home, work or your social environment) and apply the Gibbs Model of Reflection. Prepare a written report which examines and presents an argument on your logic of the event including: -

- Description What happened?
- Feelings What were you thinking and feeling?
- Evaluation What was good and bad about the experience?
- Analysis What sense can you make of the situation?
- Conclusion What else could you have done?
- Action Plan If it arose again, what would you do? Here you might consider how you could get a different outcome if it happened again.

- **Step 2** Then present a <u>5 Why's Fish Bone</u> analysis to examine and present an argument based on your logic of what might have led to the event or contributed to the event.
- **Step 3** Then compare the two reflective methods you used and reflect on which tool (Gibbs or the 5 Why's) gave you better insights as an accident investigator and why.

Your two-page report (usually a maximum 2 pages) should demonstration your ability to both investigate what happened to you and why, but also your deeper reflection on the event, your role in the event and any lessons learnt. You should submit your assessment as a Word document only, no pdf.

#### **Assessment Due Date**

Week 5 Friday (5 Apr 2024) 11:45 pm AEST

#### **Return Date to Students**

Week 7 Friday (26 Apr 2024)

#### Weighting

30%

#### **Assessment Criteria**

The following assessment criteria will be used:

- 1. Gibbs Model of Reflection (10%)
  - Evidence of development of skills for reflective practice
- 2. 5 Why's Analysis (10%)
  - Demonstrates the ability to conduct basic analysis of event causation.
- 3. Gibbs vs 5 Why's Fish Bone comparison (10%)
  - Demonstrates the ability to compare the two models and methods.

A detailed marking matrix will be provided via the Moodle site.

# **Referencing Style**

• Harvard (author-date)

## **Submission**

Online

## **Learning Outcomes Assessed**

- Construct an argument based on classic logical form.
- Explain the principles of evidence-based practice.
- Describe the role of investigation in socio-technical contexts.
- Recognise basic accident pathogen.
- Conduct a basic analysis of accident causation.
- Employ effective communication strategies appropriate to real world investigations.

#### **Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence

# 3 Contributing Factors Framework - Rail Safety and AcciMap

### **Assessment Type**

Written Assessment

## **Task Description**

This assessment task requires you to present your logic and understanding of how accident contributing/causal factors in socio-technical systems can be interpreted across the themes of Individual/Team actions, Technical Failures and Local Conditions & Organisational Factors.

You will be presented a list of findings from a rail safety accident investigation report. You will then use your understanding of socio-technical systems to develop both a Contributing Factors Framework -Rail Safety (CFF-RS) and an AcciMap for the accident. You are required to map the contributing factors from the report into a CFF-RS table. Your assessment will also require you to develop a AcciMap of the accident which mirrors your CFF-RS table items and demonstrates your understanding of complex social-technical systems of work. Your final submission will therefore present: -

- 1. A CFF-RS table using the three main headings of Individual/Team actions, Technical Failures, Local Conditions & Organisational Factors and showing the sub-headings and keywords;
- 2. A AcciMap showing how the factors you identified in the CFF-RS can be presented as a model of the accident and which also shows the contributing factors interconnectedness from a socio-technical systems point of view.

Word document only for the CFF table and/or pdf of the AcciMap if done in software other than Word.

#### **Assessment Due Date**

Week 8 Friday (3 May 2024) 11:45 pm AEST

#### **Return Date to Students**

Week 10 Friday (17 May 2024)

#### Weighting

30%

### Minimum mark or grade

Minimum mark or grade: To pass this unit students must obtain a minimum grade of 50% for assessment task 3 and a minimum grade of 50% for assessment task 4.

### **Assessment Criteria**

The marking criteria will be around:-

- 1. The use of the CFF-RS and ability to identify contributing factors as per the CFF-RS framework; (15%)
- 2. The ability to present a model of the accident using AcciMap which shows the linkages of factors which contributed to the accident (15%)

A detailed marking matrix will be presented via the Moodle site.

# **Referencing Style**

• Harvard (author-date)

#### **Submission**

Online

# **Learning Outcomes Assessed**

- Recognise that events can be analysed and interpreted in different contexts (e.g. disciplinary, socio-technical, cultural).
- Construct an argument based on classic logical form.
- Discuss the ethical implications of observed events.
- Recognise basic accident pathogen.
- Conduct a basic analysis of accident causation.
- Employ effective communication strategies appropriate to real world investigations.
- Demonstrate reflective skills appropriate to the development of the beginning practitioner.

### **Graduate Attributes**

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

# 4 Contributing Factor Framework - Maritime Safety and AcciMap

### **Assessment Type**

Written Assessment

# **Task Description**

This assessment task will now advance your ability to present your logic and understanding of how accident contributing factors in socio-technical systems can be interpreted across the themes of Individual/Team actions, Technical Failures and Local Conditions & Organisational Factors.

In this assessment you will examine the maritime accident investigation report related to the 'Herald of Free Enterprise' ferry accident.

You will be asked to complete the following 2 tasks: -

- 1. Using the Herald of Free Enterprise ferry accident investigation report (provided in Moodle), identify the contributing factors involved. Then using the CFF-MS framework for Individual/Team Actions, Technical Failures and Local Conditions & Organisational Factors present your findings using the CFF-MS table, across the main headings, sub-headings and keywords you have identified from the accident investigation report. A CFF-MS proforma response table will be provided.
- 2. Prepare a AcciMap showing how the factors you identified in the CFF-MS can be presented as a model of the accident and which also shows their interconnectedness from a socio-technical systems point of view.

Your final submission will show a table presenting the CFF-MS factors, followed by a AcciMap diagram which represents your CFF-MS.

More information will be given via the Moodle site and formal lectures.

Approximately 2/3 pages – word document only presentation for the CFF table and/or pdf AcciMap if done in software other than Word.

# **Assessment Due Date**

Week 12 Friday (31 May 2024) 11:45 pm AEST

### **Return Date to Students**

Review/Exam Week Friday (7 June 2024)

## Weighting

30%

## Minimum mark or grade

Minimum mark or grade: To pass this unit students must obtain a minimum grade of 50% for assessment task 3 and a minimum grade of 50% for assessment task 4.

# **Assessment Criteria**

The marking criteria will be around your ability to interpret accident investigation finding and then:-

- 1. Use the CFF-MS to identify contributing factors as per the CFF-MS framework; (15%)
- 2. Present a socio-technical model of the accident using AcciMap which shows the linkages of factors which contributed to the accident (15%)

A detailed marking matrix will be presented via the Moodle site.

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

# **Referencing Style**

• Harvard (author-date)

### **Submission**

Online Group

## **Submission Instructions**

One report per team to be submitted. Only Word or PDF format will be accepted.

# **Learning Outcomes Assessed**

- Recognise basic accident pathogen.
- Conduct a basic analysis of accident causation.
- Employ effective communication strategies appropriate to real world investigations.

#### **Graduate Attributes**

- Communication
- Problem Solving
- Information Literacy
- Team Work
- Information Technology Competence

# **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 <u>Academic Learning Centre (ALC)</u> 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