



# SCIE11018 *Introduction to Forensic Science*

## Term 3 - 2022

Profile information current as at 08/05/2024 10:20 am

All details in this unit profile for SCIE11018 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 has been designed as an introductory level unit with broad appeal to a wide range of students. For example, students studying health, social work, nursing, psychology, education or business as well as those studying science-based subjects might consider this elective option offered by online delivery (distance education). Its aim is to enable you to develop an appreciation of contemporary forensic analysis, with a particular emphasis on understanding DNA methods and applications. Topics studied includes: the scope of forensic science; how crime scenes are processed and how trace evidence from such scenes is collected and analysed; the different types and significance of trace evidence, including hairs, fibres and fingerprints; forensic investigations of fires and explosions; forensic examination of body fluids and human remains; forensic DNA methods. The unit involves online group discussions, peer evaluation and self-assessment within some of the assessment tasks. You will also undertake literature research on aspects of DNA profiling as part of the written assessment.

#### 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 [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

#### Offerings For Term 3 - 2022

- 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: 20%

#### 2. **Online Quiz(zes)**

Weighting: 30%

#### 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 SUTE Teacher Evaluations

##### **Feedback**

Dana was great, I really enjoyed her unit. She made herself available for all her students, unbelievably generous with her time.

##### **Recommendation**

I am very grateful to students that left official feedback as very few choose to do so, and instead call me on the phone to say thanks. My welcome video message starts with "During this term, I am here for you 24/7 over the phone, zoom or in-person". I get a great reward from their feedback which is consistently characterised by "caring" and "supportive" attributes. I will continue with this approach next year and use it every term 3 to make the Moodle page and lecture content better and more presentable.

#### Feedback from SUTE Teacher Evaluations

##### **Feedback**

There is no box for excellence. Words are not enough to describe Dana. She is very unique - such a caring and supportive person - someone we should all aspire to be. Can you please clone her, along with her caring nature for all CQU courses??!!

##### **Recommendation**

This feedback made me want to do even better next year. I think that this is the student that wanted to withdraw and got a bit of extra help from me. I will try to monitor the Moodle page better next term 3 to identify students like her before they quit. I was only ever successful in this when the students contacted me, but most of them just gave up without watching the welcome message and my plea to call me before even thinking about withdrawal. I will try to make this message more visible in a separate video

#### Feedback from SUTE Teacher Evaluations

##### **Feedback**

Some of the resources on Moodle were a little disorganised. Could set clearer expectations on criteria and assessment deadline for forum posts. Dana was very generous in extending the dates.

##### **Recommendation**

We had a few Moodle glitches with content rollover, I missed 2 pdfs that had no link, my bad. I intend to re-invigorate the Moodle page for the next term. Previous term 3 I focused on rebuilding Moodle page for Genetics, this term 3 I will try to make the Forensics Moodle page more inviting and interaction-promoting and glitch-free. Discussion forums are hard to mark, I have to read every post from every student for multiple weeks and discussion points and evaluate their own posts, their interactions and replies etc. This took me a bit more than 2 weeks hence the comment. I will keep this in mind for next term 3 and organise my time better making sure I have a week after the deadline for forums clear in my calendar so I can focus on this. Last term I had too many things going on during the marking weeks.

## Unit Learning Outcomes

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

1. Explain the scope and application of contemporary forensic science.
2. Discuss, using specific case examples, the underlying principles governing forensic crime analysis.
3. Explain the practical roles of the various sections of the forensic laboratory in the scientific investigation of different types of crime.
4. Evaluate forensic journal articles, case information and other evidence in relation to contemporary forensic science.
5. Engage in self-assessment, peer-assessment and group discussion with respect to forensic science topics.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes

 N/A Level	 Introductory Level	 Intermediate Level	 Graduate Level	 Professional Level	 Advanced Level
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## Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Group Discussion - 20%					•
2 - Online Quiz(zes) - 30%	•		•		
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				•	
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 - 20%	•		•	•	•	•		•		
2 - Online Quiz(zes) - 30%		•	•			•				
3 - Written Assessment - 50%	•		•	•				•		

## Textbooks and Resources

### Textbooks

**There are no required textbooks.**

#### Additional Textbook Information

There is no textbook prescribed for this unit. All resources are available on Moodle page.

### 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 styles below:**

- [Harvard \(author-date\)](#)
- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Dana Stanley** Unit Coordinator  
[d.stanley@cqu.edu.au](mailto:d.stanley@cqu.edu.au)

## Schedule

### Week 1 - 07 Nov 2022

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"><li>• Introduction</li><li>• Assessing the crime scene</li></ul>		

### Week 2 - 14 Nov 2022

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"><li>• Forensic microscopy</li><li>• Isotopes in hair, fibres and paints</li></ul>		Hot Topic discussion forum 1 opens Monday 14/11/2022 at 12:00 AM and closes on 20/11/2022 at 23:45 PM.

### Week 3 - 21 Nov 2022

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"><li>• Fingerprints</li></ul>		Hot Topic discussion forum 2 opens on 21/11/2022 at 12:00 AM and closes on 27/11/2022 at 23:45 PM.

### Week 4 - 28 Nov 2022

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"><li>• DNA evidence</li></ul>		Hot Topic discussion forum 3 opens on 28/11/2022 at 12:00 AM and closes on 04/12/2022 at 23:45 PM.

### Vacation Week - 05 Dec 2022

Module/Topic	Chapter	Events and Submissions/Topic
<b>Week 5 - 12 Dec 2022</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
• Serology and blood stain analysis		
<b>Week 6 - 19 Dec 2022</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
• Fire and explosions		
<b>Vacation Week - 26 Dec 2022</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
<b>Week 7 - 02 Jan 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
• Firearms and other impressions		
<b>Week 8 - 09 Jan 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
• Radiocarbon in teeth		
<b>Week 9 - 16 Jan 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
• Drugs and toxicology		
<b>Week 10 - 23 Jan 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
• Forensic anthropology, body farm research		
<b>Week 11 - 30 Jan 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
• Forensic psychology		<b>Contributions to forensic science - essay</b> Due: Week 11 Friday (3 Feb 2023) 11:59 pm AEST
<b>Week 12 - 06 Feb 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
• Forensic pathology		
<b>Exam Week - 13 Feb 2023</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
		<b>Online quiz</b> Due: Exam Week Friday (17 Feb 2023) 11:59 pm AEST

## Assessment Tasks

### 1 'Hot topic' discussion forums

#### Assessment Type

Group Discussion

#### Task Description

This assessment is based on your posts to the Hot Topic group discussion forums in Moodle. There will be three (3) graded Hot Topic forums. To get the best possible mark, you will need to contribute to all three forums. It is also recommended that you aim for five posts per forum. Each of the forums will be open for seven days only, therefore, you

will need to post to the forum within this time period. The opening and closing dates/times are listed in the Schedule section of this Unit Profile. The first forum will be open in week 2, the second in week 3 and the third in week 4. Your overall marks for the three forums will be released by the return date specified in this section. More help with this assessment will be available on the unit Moodle site.

In order to make this more effective for you, the class will be divided into groups of around twenty-five students so that you don't have to read posts from everyone taking the unit this year. This change has been made in response to student feedback from earlier years because working through all of the discussion board posts was too time-consuming.

***There is no minimum mark for this assessment therefore, you do not have to complete it. However, if you do not contribute to the forums, you will NOT qualify for a supplementary assessment (SA). Thus, if you do not pass the minimum grade for this unit via the other two assessments, you will not be able to take a supplementary assessment for discussion forums to pass the minimum grade.***

### **Assessment Due Date**

The 3 forums will run for one week each during weeks 2-4.

### **Return Date to Students**

We will aim to provide the feedback within 3 weeks after the last forum post.

### **Weighting**

20%

### **Assessment Criteria**

Note: each assessment criterion will be marked on a scale from 0 to 5, giving a total of 20 marks across all four criteria:

1. **Quality of contributions** - in terms of their relevance to the discussion.
2. **Scholarly contributions** - based on evidence of use of wider reading and academic 'detective work', to address the discussion topic.
3. **Breadth of contributions** - based on the number of relevant postings within the forum.
4. **Interactivity of contributions** - engages in discussion with other student posts.

**There is more help available on Moodle for this assessment.**

### **Referencing Style**

- [Harvard \(author-date\)](#)
- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

### **Submission**

Online

### **Submission Instructions**

Students must contribute to the 'Hot topic' discussion forums.

### **Learning Outcomes Assessed**

- Engage in self-assessment, peer-assessment and group discussion with respect to forensic science topics.

### **Graduate Attributes**

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

## **2 Online quiz**

### **Assessment Type**

Online Quiz(zes)

### **Task Description**

This assessment task will take the form of a 45 minute online 'open book' multiple choice quiz in Moodle. There are 30 questions drawn from a pool based on material derived from the weekly learning materials. The quiz questions cover all of the topics from week 1 to week 11 inclusive.

**It is essential that you have studied all the material on these topics by the date of the assessment so that you are well-prepared to make the most of the quiz.** While the 'open book' nature of the quiz will enable you to make one or two checks for those questions where you are unsure of the exact answer, you will not have enough time to read the material. Please ensure that you are well-prepared to take the assessment.

A trial version of the online quiz will be available in Moodle for practice before attempting the actual assessment. This Sample/Practice Quiz will have the same 30 questions for everyone, and its purpose is to expose you to the quiz setup and flow. It will not shuffle the questions for each next user.

**Note - make sure that you 'submit' your answers before the time is up, or you will be timed out after a maximum of 45 minutes, and all of your answers will be lost.**

**The quiz will open one week prior to the due date of the assessment. You will have one attempt only. This assessment task must be completed by the due date specified. In the absence of an approved extension, there will be no opportunity to complete the quiz at a later date.**

**If you have any technical problems during the quiz itself, you need to contact the unit coordinator, Dana Stanley, as soon as possible on the day of the assessment. Contact details will be available on the unit Moodle site.**

#### **Number of Quizzes**

1

#### **Frequency of Quizzes**

Other

#### **Assessment Due Date**

Exam Week Friday (17 Feb 2023) 11:59 pm AEST

You must start this quiz at least one hour before the quiz closes.

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

Exam Week Friday (17 Feb 2023)

Student will receive their mark for the quiz as feedback immediately on completion of the quiz (details of correct answers to each question are not released, as some questions may be re-used in subsequent assessments).

#### **Weighting**

30%

#### **Minimum mark or grade**

To pass this unit and demonstrate that you have met the learning outcomes, you need to score at least 50 % for the quiz.

#### **Assessment Criteria**

Each answer will be given one mark if correct and 0 marks if incorrect (30 marks in total).

There will be no negative marking, so you should attempt all 30 questions.

#### **Referencing Style**

- [Harvard \(author-date\)](#)
- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

#### **Submission**

Online

#### **Submission Instructions**

Complete the quiz on Moodle site before the due date.

#### **Learning Outcomes Assessed**

- Explain the scope and application of contemporary forensic science.
- Explain the practical roles of the various sections of the forensic laboratory in the scientific investigation of different types of crime.

#### **Graduate Attributes**

- Problem Solving
- Critical Thinking
- Information Technology Competence

### **3 Contributions to forensic science - essay**

#### **Assessment Type**

Written Assessment



### Task Description

Over the past century, advancements in forensic science have changed the way that many crime scenes have been processed. Greater scientific understanding, improved methodologies and new technologies have all contributed to the body of evidence used in criminal prosecutions.

Please write an essay discussing **the role of forensics in solving crimes related to fire and explosives abuse**.

Your discussion should include details of the historical development and improvement of methods and technologies, their contributions to forensic science, the use or misuse of evidence in criminal prosecutions, and the application and limitations (pros and cons) of this area of evidence. Your discussion should also be supported with appropriate case examples.

Your essay topic is on **fire and explosives abuse**, however, the title is entirely up to you. Try to come up with a catchy, informative and precise title.

**Please note that each of the forensic methodologies is an independent lecture and that lecture order in Moodle is mostly randomly selected.** Thus, after watching the week one introduction and crime scene lecture, you can go directly to the week with lectures relevant to this essay in order to start working on your assignment as soon as possible.

Your assessment should be approximately 1500 words (you should not go over 2000 words without references), and should be written using correct grammar and English expression. It should be well-presented using plain text such as Times New Roman or Arial size 12 font. Please use 1.5 or 2 line spacing and do not use background images or themes. Include a cover page with your name, student number and title. **There is more help available on Moodle for this assessment.**

**All essays will automatically be submitted to the similarity detection website Turnitin, in accordance with CQUniversity policy. Please ensure all work is your own and has not previously been submitted elsewhere. The due date is set for week 11, however, I encourage you to aim for earlier submission. Whenever you choose to submit, we will aim to give the feedback and marks within two weeks. You will have an option to get one-on-one help and feedback before you submit.**

### Assessment Due Date

Week 11 Friday (3 Feb 2023) 11:59 pm AEST

Students must submit their assessment via the unit Moodle site.

### Return Date to Students

Exam Week Friday (17 Feb 2023)

Your marked assessment will be returned via Moodle.

### Weighting

50%

### Minimum mark or grade

50 %

### Assessment Criteria

Marks will be awarded for:

- Original style and arguments (10 marks).
- Contribution of the topic to forensic science (20 marks)
- Pros and cons of the topic clearly argued in terms of its applications and limitations to forensic science (20 marks).
- Discussion appropriately supported by case examples (20 marks).
- Appropriate citations used and referencing consistent in format throughout (10 marks).
- Neat, 1.5 or 2 line spacing, using size 12 font. Adheres to the word limit (10 marks).
- The structure follows a story, no jumping back and front to the same topic. Tables and figures, if used, are well presented, titled and referred to in the text (10 marks).

### Referencing Style

- [Harvard \(author-date\)](#)
- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

### Submission

Online

### Submission Instructions

Students must submit their assessment via the unit Moodle site.

### Learning Outcomes Assessed

- Explain the scope and application of contemporary forensic science.
- Discuss, using specific case examples, the underlying principles governing forensic crime analysis.

- Evaluate forensic journal articles, case information and other evidence in relation to contemporary forensic science.

#### **Graduate Attributes**

- Communication
- Critical Thinking
- Information Literacy
- 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