

Principles of Forensic Investigation 1008NSC - Tri 2 2021 - Nathan Campus - Blended

1. General Course Information

1.1 Course Details

Course code	1008NSC
Course title	Principles of Forensic Investigation
Academic organisation	ESC School of Environment and Science
Trimester	Trimester 2 2021
Mode	Blended
Level	Undergraduate
Location	Nathan, On Campus
Credit point value	10

Restrictions:

Restriction: Students must be enrolled in the following programs: 1264 B Forensic Science, 1433 B Forensic Sc/B Crim Crim Just

Course Description:

This course, 1008NSC Principles of Forensic Investigation, is available only to students enrolled in the programs 1264 Bachelor of Forensic Science or 1368/1433 Bachelor of Forensic Science/ Bachelor of Criminology and Criminal Justice. It is a core course for the Forensic Molecular Biology Major and for the Forensic Chemistry Major. This 1008NSC course is important to you because it aims to provide a basis for your professional practice after graduation. Pre-requisite courses: 1001NSC Human Biology; and 1021SCG Chemistry 1A

Assumed Background:

Pre-requisite courses: 1001NSC Human Biology; and 1021SCG Chemistry 1A.

1.2 Course Introduction

This course introduces you to the principles of forensic investigation, taking you from the crime scene to the preparation of a statement of expert evidence for court. This course will include lecture, tutorial and laboratory components to provide you with learning opportunities. Delivery may be online or in person.

During this course you will be exposed to laboratory investigations and tests that will lie at the core of your professional practice following graduation. The statement of expert evidence will carry through to the Forensic Evidence and the Expert Witness course where you will have the opportunity to present your evidence at Brisbane Magistrates Court in front of barristers from the Queensland Bar Association.

Previous Student Feedback

Feedback from students taking this course last year was very positive, despite COVID interruption. Students adapted well to the temporary online laboratory sessions. Majority of SEC data in quartile 4.

Students, who attended them, found the tutorials for statement writing helpful and these will be run again this year. Additional guidance about marking criteria for statements and laboratory reports is provided via Learning at Griffith.

1.3 Course Staff

Primary Convenor **Dr William Gee**

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Consultation	By Appointment

1.4 Timetable

Timetables are available on [the Programs and Courses website](#).

NB: Details contained in this Section of the course profile and Section 4.1 Learning Activities are to be read in conjunction with the official class timetable. The published class timetable which is the authoritative source for timetabling information for all campuses can be located by clicking on the above link.

Additional Timetable Information

This course will be offered in a blended mode in Trimester 2, 2021. This means that lectures and tutorials will be offered online owing to COVID/student numbers restrictions, but students will return to campus for laboratory classes, assuming no changes to Government regulations. Ensure you check the Learning@Griffith course site for specific details of classes, as well as Griffith University's COVID updates website in the event of local outbreaks.

The lectures, tutorials and laboratories form a solid basis for professional practice, and elements of this course provide the necessary framework for learning in relation to subsequent forensic courses in students' chosen major (either forensic molecular biology or forensic chemistry). Laboratories may be assessable (see under Assessment Plan).

1.5 Lecture Capture

It is standard practice at Griffith University that lectures timetabled in lecture capture-enabled venues are recorded and made available to students on the relevant course site, in accordance with the University's [Lecture Capture Policy](#).

The lecture series delivered as part of this course will be recorded and accessible via the Learning@Griffith course site.

1.6 Technical Specifications

Any computer running Microsoft Windows XP, 7, 8 (any variation), 10 or 10s, any Apple computer, or any computer running any version on Linux, with a word processor, PDF viewer and functional Web browser. An Internet connection (wired or WIFI) is needed for web browsing.

Minimum requirements for a computer used to study online can be found at: <https://www.griffith.edu.au/online/about-us/minimum-it-requirements>

2. Aims, Outcomes & Graduate Attributes

2.1 Course Aims

This course is important within your degree because it aims to instil a broad understanding of the principal investigative methods underlying your professional practice.

It aims to explain these investigative methods from the crime scene to the forensic laboratory by describing how crime scenes are defined and recorded; the importance of identification, collection, preservation, and continuity of items of

evidentiary value (evidence); the role and limitations of presumptive testing and culminating in confirmatory chemical testing and DNA profiling and comparison.

Both the biological and chemical underpinnings of forensic science are emphasised, prompting you to align with one in the form of choosing a major.

2.2 Learning Outcomes

After successfully completing this course you should be able to:

1. CONTENT-BASED OUTCOMES

- 1.1 Explain the importance of the chain of custody in ensuring the provenance of forensic evidence.
- 1.2 Explain how to collect appropriate samples from a crime scene and how to package and label them correctly.
- 1.3 Describe the laboratory processes used in the analysis of crime scene evidence by both forensic chemists and forensic biologists.

2. COGNITIVE OUTCOMES

- 2.1 Explain with examples how chemistry and biology underpin many common forensic practices and tasks.
- 2.2 Explain the reasoning involved in selecting the appropriate tests for the samples collected from a crime scene.

3. APPLICATION OUTCOMES

- 3.1 Package and label items recovered from a crime scene in a way which sets up and maintains the continuity of this evidence prior to presentation in court.
- 3.2 Identify correct and incorrect packaging and labeling methods for a variety of crime scene samples and understand the impact of any such errors on the evidential validity of the items.
- 3.3 Be exposed to basic laboratory analysis of chemical and biological crime scene samples.
- 3.4 Keep appropriate laboratory notebooks containing contemporaneous notes about the steps, processes and results obtained from your analyses.
- 3.5 Formally express results and interpreted opinion from your analyses in a formal legal statement for evidential purposes.

4. NON-ASSESSABLE LEARNING OBJECTIVES

- 4.1 Understand the importance of working effectively as a group in a laboratory setting
- 4.2 Decide whether a chemistry or biology major is the right choice for you

2.3. Graduate Attributes

For further details on the Griffith Graduate please [click here](#)

Griffith University prepares influential graduates to be:

- Knowledgeable and skilled, with critical judgement
- Effective communicators and collaborators
- Innovative, creative and entrepreneurial
- Socially responsible and engaged in their communities
- Culturally capable when working with First Australians
- Effective in culturally diverse and international environments

This table demonstrates where each of the Griffith Graduate Attributes is taught, practised and assessed in this course.

For further details on the Griffith Graduate Attributes please refer to [The Griffith Graduate policy](#).

University wide attributes

Graduate Attribute	Taught	Practised	Assessed

Knowledgeable and skilled, with critical judgement	•	•	•
Effective communicators and collaborators	•	•	•
Socially responsible and engaged in their communities	•		

3. Learning Resources

3.1 Required Resources

Details of your Required Learning Resources are available from the [Reading List](#).

3.2 Recommended Resources

Details of your Recommended Learning Resources are available from the [Reading List](#).

3.3 University Learning Resources

The University provides many facilities and support services to assist students in their studies. Links to information about University support resources that are available to students are included below for easy reference.

Readings - New online service enabling students to access Required and Recommended Learning resources. It connects to the library catalogue to assist with quickly locating material held in Griffith libraries and enables students to manage and prioritise their readings, add personal study notes and export citations.

Learning@Griffith - there is a dedicated website for this course via the Learning@Griffith at myGriffith.

Academic Integrity Tutorial - this tutorial helps students to understand what academic integrity is and why it matters. You will be able to identify types of academic misconduct, understand what skills you will need in order to maintain academic integrity, and learn about the processes of referencing styles.

Student Support - provides a range of services to support students throughout their studies including personal support such as Counselling and Health Services; Academic support; and Financial and Welfare support.

The **Careers and Employment Team** provides: Career Wellbeing, Career Planning and Decision Making, Finding Jobs, Skills Identification and Development, Graduate Employment Information, LinkedIn Profile Review, Interview Preparation, Online Psychometric and Aptitude Test Preparation, International Student Support, Disability Disclosure Strategies and Higher Degree Research (HDR) Career Consultations.

Library and Learning Services: Library and Learning Services provides a wide range of quality client-focused services and programs to students, researchers and staff of the University. Library and Learning Services works in collaboration with the academic community to achieve academic and research outcomes.

Support for learning - the University provides access to common use computing facilities for educational purposes.

Code of Practice - Griffith Information Technology Resources.

3.5 Other Learning Resources & Information

Supporting materials will be as provided by the teaching staff primarily on Learning@Griffith.

4. Teaching & Learning Activities

4.1 Learning Activities

Week Commencing	Activity	Learning Outcomes
19 Jul 21 - 27 Aug 21	Weeks 1 - 5 (Lecture Series): Lecture Series: a series of two-hour lectures will be presented by the course staff. Topics covered may include: Introduction to Forensic Investigation; Introduction to Forensic Chemistry; Chromatography; Qualitative and Quantitative Tests; and other applications of chemistry to forensic science.	1.1, 1.3, 2.1, 2.2, 4.2
19 Jul 21 - 27 Aug 21	Weeks 1 - 5 (Tutorial Series): Tutorial Series: the weekly two-hour tutorial will expand upon topics raised in the associated forensic chemistry lectures. These will be led by a member of the course staff, with an expectation of participation from the students. Assessed online quizzes may be scheduled within these time slots.	1.1, 1.3, 2.1, 2.2

Week Commencing	Activity	Learning Outcomes
2 Aug 21 - 6 Aug 21	Forensic Chemistry Laboratory (Laboratory): You will participate in a 3-hour forensic chemistry laboratory class. This laboratory session will allow you to understand how presumptive tests are applied to forensic chemistry and chromatographic techniques for identification. This session will allow you to obtain results which will help determine the perpetrator in a mock forensic scenario.	1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 3.4, 3.5, 4.1, 4.2
30 Aug 21 - 1 Oct 21	Weeks 6 - 10 (Lecture Series): Lecture Series: a series of two-hour lectures will be presented by the course staff. Topic covered may include: Introduction to DNA; Genetic Analysis and PCR; DNA typing; and other applications of biology to forensic science.	1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 4.2
30 Aug 21 - 1 Oct 21	Weeks 5 - 10 (Tutorial Series): Tutorial Series: the weekly two-hour tutorial will expand upon topics raised in the associated forensic biology lectures. These will be led by a member of the course staff or a guest lecturer, with an expectation of participation from the students. Assessed online quizzes may be scheduled within these time slots.	1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2
6 Sep 21 - 10 Sep 21	Forensic Molecular Biology Laboratory (Laboratory): You will participate in a 3-hour forensic molecular biology laboratory class. This session will allow you to understand how biological samples are analysed using presumptive tests and DNA profiling and you will obtain DNA results and learn how to interpret the data as it applies to a forensic investigation.	1.1, 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3, 3.4, 3.5, 4.1, 4.2
4 Oct 21 - 15 Oct 21	Weeks 11 - 12 (Lecture Series): Twin 2 hour lecture slots covering case studies, forensic report writing, or legal statement writing.	1.1, 1.3, 2.1, 2.2, 3.4, 3.5, 4.1
4 Oct 21 - 15 Oct 21	Weeks 11 - 12 (Tutorial Series): Twin sets of tutorials matching the week's lectures explaining the significance and logistics of forensic report writing. These slots may also be used to present case studies, or for revision sessions.	1.1, 1.3, 2.1, 2.2, 3.4, 3.5, 4.1, 4.2

4.2 Other Teaching and Learning Activities Information

Public Holidays

If a lecture or tutorial class is scheduled on a public holiday (or is cancelled for any unexpected reason), this class will normally not be repeated. Public Holidays in Brisbane for Trimester 2 2021 are:

- Brisbane Exhibition: Wednesday 11 August 2021
- Queen's Birthday: Monday 04 October 2021

Student Vacation Week

- 9 -13 August 2021 (No activities are scheduled during this period)

This course will be presented as a series of lectures, tutorials and practical laboratory sessions, delivered in person or online.

The skills and knowledge you gain during this course will be useful to you for the remainder of your professional life. They will allow you to critique the analyses of others, perform analyses yourself if appropriate to your field, and will help you present expert evidence before a court.

This material will be useful to you irrespective of your specific choice of forensic specialty, since generic skills and knowledge learned can be applied to most forensic specialties.

Disability. If any student has a disability and/or health condition that may impact on their ability to successfully undertake required learning activities in this course, they are encouraged to complete the [Griffith University Disclosure Statement](#) and advise their Course Convenor.