# NATS 7001 ADVANCED CRIMINALISTICS

**Credit Points 10** 

Legacy Code 301151

Coordinator Mark Williams (https://directory.westernsydney.edu.au/search/name/Mark Williams/)

Description This subject is designed to provide an in-depth knowledge of the following eight evidence categories: glass, textile fibres, paint, fire debris, explosives, firearm discharge residues, illicit drugs, and hair. Each stand-alone module introduces the evidence type and its forensic significance, details the relevant distinguishing and discriminating characteristics for the trace material in question, presents the analytical techniques commonly applied in the criminalistics laboratory, and discusses data interpretation and evidential value. The subject is unique in terms of its coverage of these trace evidence categories from an operational forensic science perspective.

School Science

Discipline Forensic Science

Student Contribution Band HECS Band 2 10cp

Level Postgraduate Coursework Level 7 subject

#### Restrictions

Students must be enrolled in 3741 Master of Forensic Science, 3742 Graduate Diploma in Forensic Science or 3743 Graduate Certificate in Forensic Science.

# **Learning Outcomes**

On successful completion of this subject, students should be able to:

- Describe each evidence category in terms of general characteristics and how the material may be encountered in a criminal investigation
- 2. Appreciate the variations in physical and chemical properties that can be used to characterize samples from each evidence category
- 3. Recognize the importance of transfer and persistence phenomena for each trace evidence type
- Understand the range of analytical techniques that can be applied within the criminalistics laboratory and the information generated by each technique
- 5. Describe recommended evidence collection methods and analytical sequences appropriate for each evidence category
- Understand the difficulties associated with the interpretation of analytical results for each evidence type and recognize the factors that can impact on relative evidential value

### **Subject Content**

Module 1 Glass

Module 2 Textile Fibers

Module 3 Paint

Module 4 Fire Debris Analysis

Module 5 Explosives

Module 6 Firearm Discharge Residues

Module 7 Illicit Drugs

Module 8 Paper, Inks and Toners

#### **Assessment**

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Туре	Length	Percent	Threshold	Individual/ Group Task
Final Exam	Essay 1400 words	100	N	Individual

**Teaching Periods** 

# Uni of Florida/Canberra-Term 3 (2022)

#### **Online**

#### **Online**

Subject Contact Chris Lennard (https://directory.westernsydney.edu.au/search/name/Chris Lennard/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=NATS7001\_22-FT3\_ON\_O#subjects)

# Florida Term 3 (2023)

#### **Online**

#### Online

Subject Contact Chris Lennard (https://directory.westernsydney.edu.au/search/name/Chris Lennard/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=NATS7001\_23-FT3\_ON\_2#subjects)