

# NATS 7008 ENVIRONMENTAL FORENSICS 1

**Credit Points** 10

**Legacy Code** 301152

**Coordinator** Val Spikmans ([https://directory.westernsydney.edu.au/search/name/Val Spikmans/](https://directory.westernsydney.edu.au/search/name/Val%20Spikmans/))

**Description** The subject is designed for professionals working in environmental regulatory authorities and laboratories at the federal, state or local level. This includes but is not limited to police jurisdictions, environmental protection agencies (EPAs), coastguards, park rangers, customs and quarantine officials. It is designed to give the environment law enforcement officer a background in the principles of contaminant analysis and transport in the environment with the ultimate aim of determining liability for pollution. The syllabus includes the main modes of contaminant transport in air, water and land, as well as an in-depth look at hydrocarbon fingerprinting.

**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:

1. Communicate their knowledge, ideas and opinions in environmental forensics in appropriate written forms
2. Identify and analyse the main features of problems related to environmental forensics
3. Describe environmental systems and their forensic relevance with an international perspective
4. Describe and calculate the partitioning and speciation of chemicals in the environment
5. Interpret, analyse and evaluate contaminant transport models

## Subject Content

1. Introduction
2. Toxicity
3. Identification of hydrocarbons
4. Fate of chemicals - partitioning
5. Fate of chemicals - biotransformations
6. Environmental transport models
7. Groundwater transport models
8. Atmospheric dispersion models

## 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.

Type	Length	Percent	Threshold	Individual/Group Task
Final Exam	Not specified	100	N	Individual

Teaching Periods

## Uni of Florida/Canberra-Term 2 (2022)

**Online**

**Online**

**Subject Contact** Val Spikmans ([https://directory.westernsydney.edu.au/search/name/Val Spikmans/](https://directory.westernsydney.edu.au/search/name/Val%20Spikmans/))

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=NATS7008\\_22-FT2\\_ON\\_0#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS7008_22-FT2_ON_0#subjects))

## Florida Term 2 (2023)

**Online**

**Online**

**Subject Contact** Chris Lennard ([https://directory.westernsydney.edu.au/search/name/Chris Lennard/](https://directory.westernsydney.edu.au/search/name/Chris%20Lennard/))

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=NATS7008\\_23-FT2\\_ON\\_2#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7008_23-FT2_ON_2#subjects))