

# NATS 7059 FORENSIC DIGITAL IMAGING

**Credit Points** 10

**Legacy Code** 301442

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

**Description** This online subject is designed to provide an in-depth knowledge of scientific and forensic imaging. Forensic digital imaging serves important functions within forensic science for the purpose of scene and item documentation, detection and enhancement of forensic evidence, and as a means of communicating forensic observations and interpretations. The subject includes modules covering the following areas: physics of light, colour and optics; forensic photographic lighting techniques; image recording systems; image processing; and principles of forensic photography and imaging. This subject is taught by the University of Lausanne, Switzerland, as part of a collaborative venture between Western Sydney University and the University of Lausanne.

**School** Science

**Discipline** Forensic Science

**Student Contribution Band** HECS Band 2 10cp

Check your fees via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Postgraduate Coursework Level 7 subject

## Restrictions

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

## Assumed Knowledge

Good general science knowledge (including physics and mathematics).

## Learning Outcomes

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

1. Describe the fundamentals of light, colour and optics
2. Discuss the basis behind photography, digital imaging and image processing
3. Understand the handling and adjustment of cameras and lenses
4. Select and use appropriate image processing tools
5. Choose and implement forensic lighting techniques
6. Explain advanced techniques in forensic photography and image processing
7. Identify solutions for real-world forensic photography problems
8. Discuss the principles of scientific photography applied to forensic science
9. Employ non-destructive digital image workflows and follow recommended operating procedures from image capture through to final output, ensuring that physical and judicial integrity of photographic evidence is preserved

## Subject Content

1. Physics of light, colour and optics
2. Lenses and lens aberrations

3. Photographic sensors and filters
4. Photographic lighting techniques
5. Image recording systems
6. Digital image processing
7. Image processing workflows
8. Scientific and forensic photography and imaging

## 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	Mandatory
Final Exam		100	N	Individual	N

Teaching Periods

## Uni of Florida - Term 3 (2025)

### Online

#### Online

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

[View timetable](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7059_25-FT3_ON_2#subjects) ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=NATS7059\\_25-FT3\\_ON\\_2#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7059_25-FT3_ON_2#subjects))