

# NATS 7002 BIOLOGICAL AGENTS 1

**Credit Points** 10

**Legacy Code** 301154

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

**Description** This subject introduces students to the key concepts involved in Biosecurity and Microbial Forensics, with a focus on understanding the types of biological agents that pose potential security risks and the system and practices involved in investigation and management of potential threats.

**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

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. collate, analyse, evaluate, interpret and present information relating to Biosecurity and Microbial Forensics
2. identify and analyse potential biosecurity threats and to implement and evaluate appropriate microbial forensic techniques for threat resolution, with independent critical and creative thinking
3. respond to potential biosecurity threats with the ability to initiate new ideas, implement effective decisions and cope with uncertainty
4. understand the health, environmental, economic, political, legal and social issues related to biosecurity, with an international perspective

## Subject Content

Module 1: Fundamentals and History of Biosecurity

Module 2: Biological Agents

Module 3: Epidemiology and Investigation of Disease Outbreaks

Module 4: Sample Collection and Handling

Module 5: Biological Agent Identification and Characterisation

Module 6: Responses to Biological Threats & Legal Aspects of Biosecurity

## 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/<br>Group Task |
|------------|---------------|---------|-----------|---------------------------|
| Final Exam | Not specified | 100     | N         | Individual                |

## Prescribed Texts

- Microbial Forensics Bruce Budowle, Steven E. Schutzer, Roger G. Breeze, and Paul S. Keim Academic Press; 2nd edition, 2010 ISBN: 9780123820068

## Teaching Periods

## Uni of Florida - Term 3 (2024)

### Online

### Online

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

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=NATS7002\\_24-FT3\\_ON\\_2#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS7002_24-FT3_ON_2#subjects))