

# NATS 7023 FORENSIC IMMUNOLOGY

**Credit Points** 10

**Legacy Code** 301146

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

**Description** This subject will introduce students to the principles of immunology, immunological techniques, and their application to forensic analyses. This subject is taught by the University of Florida as part of a collaborative venture between the University of Florida and Western Sydney University. Note: Further information on this subject is available from the University of Florida.

**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. To understand the cellular basis of immunity, including innate and adaptive immunity
2. To understand the principles of antibody-antigen interactions
3. To know the functional and structural properties of antibodies
4. To know to the details of the immune system for capturing and displaying antigens to lymphocytes
5. To know the details of cell-mediated immune responses and the effector mechanisms of cell mediated immunity
6. To know the details of the humoral immune response
7. To understand the process resulting in antibody diversity
8. To understand the processes of complement mediated reactions
9. To understand the processes of hypersensitivity
10. To know examples of diseases caused by defective immune responses, congenital and acquired immunodeficiencies
11. To know the principles and processes of Immunology and serology laboratory methods

## Subject Content

Module 1 The Basics of Immunology

Module 2 Antibodies

Module 3 Antigen Capture, Presentation and Recognition

Module 4 Cell Mediated and Humoral Immune Responses

Module 5 Diversity, Assembly, Switching and Maturation

Module 6 Complement System, Activation and Regulation

Module 7 Immune Response Disorders

Module 8 Immunology and Serology Laboratory Methods

## 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 1 (2022) 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/even/timetable/?subject\\_code=NATS7023\\_22-FT1\\_ON\\_0#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS7023_22-FT1_ON_0#subjects))

## Uni of Florida/Canberra-Term 3 (2022) 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/even/timetable/?subject\\_code=NATS7023\\_22-FT3\\_ON\\_0#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS7023_22-FT3_ON_0#subjects))

## Florida Term 1 (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=NATS7023\\_23-FT1\\_ON\\_2#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7023_23-FT1_ON_2#subjects))

## Florida Term 3 (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=NATS7023\\_23-FT3\\_ON\\_2#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS7023_23-FT3_ON_2#subjects))