

# NATS 3054 HUMAN SYSTEMS PHYSIOLOGY 2

**Credit Points** 10

**Coordinator** Kayte Jenkin (<https://directory.westernsydney.edu.au/search/name/Kayte Jenkin/>)

**Description** Human Systems Physiology 2 builds upon the physiological concepts and terminology introduced in level 1 and level 2 physiology subjects. The focus of this subject is on the function and regulation of the renal, lymphatic, immune, digestive, hepatic, and reproductive systems, and their physiological integration with other organ systems and processes within the body. This subject emphasises how visceral organ system function and integration is essential for maintaining homeostasis within the human body. The integrative physiology of the visceral organ systems is explored through problem-based learning activities assuring application of critical analysis and effective oral and written communication.

**School** Science

**Discipline** Medical 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** Undergraduate Level 3 subject

**Pre-requisite(s)** NATS 1010

**Equivalent Subjects** NATS 2035

**Incompatible Subjects** BIOS 1025  
BIOS 1022

**Restrictions**

Must have passed 80 Credit Points

**Assumed Knowledge**

Physiology knowledge equivalent to Level 2

## Learning Outcomes

After successful completion of this subject, students will be able to:

1. Explain the functions, regulation, and integration of the renal, lymphatic, immune, digestive, hepatic, and reproductive systems of the human body
2. Explain the maintenance of homeostasis by incorporating an understanding of the visceral organ systems with knowledge of other organ systems (e.g., the nervous, cardiovascular, respiratory, and endocrine systems).
3. Apply physiological principles to solve problem-based questions through the collection, interpretation, and analysis of data
4. Critically evaluate and effectively communicate physiological data and an understanding of integrative physiology through various formats, both individually and in groups

## Subject Content

1. Renal system physiology
2. Lymphatic system physiology

3. Blood and Immune system physiology including innate and adaptive immunity
4. Digestive system and hepatic physiology
5. Reproductive system physiology including pregnancy and development

## Special Requirements

**Essential equipment**

All students are required to have and wear closed-toed shoes, laboratory coat and safety glasses when working in the Physiology laboratory spaces. Students need to complete and provide evidence of an online WHS induction quiz before entering the first practical class.

## 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
Participation	4 x 2 hours	10	N	Group/ Individual	N
Quiz	4 x 15 minutes	20	N	Individual	N
Report	1000 words	25	N	Individual	N
Practical Exam	40 minutes	20	N	Individual	N
Final Exam	2 hours	25	N	Individual	N

**Prescribed Texts**

**Human Anatomy & Physiology**

Global 2nd Edition

By: Erin C. Amerman

**Teaching Periods**

## Spring (2025)

**Campbelltown**

**Hybrid**

**Subject Contact** Kayte Jenkin (<https://directory.westernsydney.edu.au/search/name/Kayte Jenkin/>)

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=NATS3054\\_25-SPR\\_CA\\_3#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS3054_25-SPR_CA_3#subjects))

**Parramatta - Victoria Rd**

**Hybrid**

**Subject Contact** Kayte Jenkin (<https://directory.westernsydney.edu.au/search/name/Kayte Jenkin/>)

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=NATS3054\\_25-SPR\\_PS\\_3#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS3054_25-SPR_PS_3#subjects))