

# NATS 1024 INTRODUCTION TO PHYSIOLOGY (WSTC)

**Credit Points** 10

**Legacy Code** 700302

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

**Description** This unit introduces the concept of homeostasis and critically examines examples of how the body systems are regulated and homeostatically controlled. The unit uses a body-systems approach to examine the physiology of tissues, organs and systems in order to develop an integrated view of the regulated functioning of the human body.

**School** Science

**Discipline** Medical Science

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

Check your HECS Band contribution amount 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 1 subject

**Equivalent Subjects** NATS 1017 - Introduction to Human Physiology  
LGYA 6186 - Physiology 1 BIOS 1025 - Introduction to Physiology

**Incompatible Subjects** BIOS 1022 - Introduction to Human Biology  
BIOS 1023 - Introduction to Human Biology (WSTC)

**Restrictions** Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory subjects listed in the program structure prior to enrolling in this University level subject. Students enrolled in the combined Diploma/Bachelor programs listed below must pass all College Preparatory subjects listed in the program structure before progressing to the Year Two subjects.

## Learning Outcomes

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

1. Describe the physiology of the discussed organ systems in detail.
2. Explain how the discussed organ systems are integrated and controlled by the endocrine and nervous system in order to maintain homeostasis.
3. Identify and list examples of negative and positive feedback loops.
4. Conduct simple measurements and record and interpret the results.
5. Interpret, present and discuss recorded data of the functioning of one organ system.
6. Analyse the complexity of the selected organ systems.
7. Communicate effectively by listening, speaking and participating in discussion of physiology

## Subject Content

1. Homeostasis
2. Physiology of the Nervous System
3. Cardiovascular Physiology
4. Respiratory physiology
5. Renal function and body fluid homeostasis
6. Physiology of the endocrine system
7. Muscle physiology and exercise

8. Nutrition, metabolism and gastrointestinal function
9. Physiology of the reproductive system

## 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.

Item	Length	Percent	Threshold	Individual/Group Task
a) Intra-session exam 1	a) Online 30 mins	20	N	Both (Individual & Group)
b) Intra-session exam 2 c)	b)Online 30 mins c) 2 hours per week,			
Logbook/Workbook	completed in class			
Intra-session mid-term exam	1 hour	20	N	Individual
Logbook / Workbook	5 x 3hr lab sessions. Logbook to be completed during this time	25	N	Individual
Final Exam	2 hours	35	N	Individual

Prescribed Texts

- Amerman, EC, 2016, Human Anatomy and Physiology, Pearson Education Ltd, UK

Teaching Periods