

# NATS 2034 HUMAN SYSTEMS PHYSIOLOGY 1

**Credit Points** 10

**Legacy Code** 301269

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

**Description** This unit builds upon the core concepts and terminology introduced in Concepts in Physiology, focussing on the function of body organ systems, exploring the knowledge of how these organ systems are regulated, integrated, and function within the human body. The focus will be on the muscular, nervous, cardiovascular, respiratory and endocrine organ systems. Students will collect, interpret and analyse data to develop an understanding of the physiological responses 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 2 subject

**Pre-requisite(s)** BIOS 1033

**Incompatible Subjects** BIOS 1022 - Introduction to Human Biology

## Learning Outcomes

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

1. Identify, describe and explain the physiological processes of the muscular, nervous, cardiovascular, respiratory and endocrine systems.
2. Describe the physiological processes of muscle contraction in skeletal, smooth and cardiac muscle.
3. Name the component parts of the nervous and endocrine systems, and describe their roles in the processes of homeostasis and regulation of other organ systems.
4. Identify and describe the independent functions of the cardiovascular and respiratory systems, and their co-dependence for delivery of oxygen and clearance of metabolic products.
5. Discuss and explain data from laboratory activities and concepts from in-class activities.

## Subject Content

- Muscle physiology
- Neurophysiology
- Cardiovascular system
- Respiratory system
- Endocrine 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
Quiz	20 minutes each	25	N	Individual
Participation	Duration of practical class (2 hrs)	10	N	Group
Report	1,000 words	20	N	Individual
Final Exam	2 hours	45	N	Individual

### Prescribed Texts

- Amerman, E, 2019, Human anatomy & physiology (Second edition; Global ed.), Pearson ISBN: 9781292260174

### Teaching Periods

#### Autumn

#### Campbelltown

##### Day

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

[View timetable \(https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=NATS2034\\_22-AUT\\_CA\\_D#subjects\)](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS2034_22-AUT_CA_D#subjects)

#### Parramatta - Victoria Rd

##### Day

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