# **BIOS 1035 ANATOMY AND PHYSIOLOGY IN HEALTH**

#### Credit Points 10

Legacy Code 301350

Coordinator Andrey Zheluk (https://directory.westernsydney.edu.au/ search/name/Andrey Zheluk/)

**Description** This subject introduces the levels of structural organisation of the human body together with scientific and medical terminology used in anatomy and physiology. It deals with gross structure and function of the major organ systems of the human body and where appropriate, a brief outline of environmental factors and personal health practices that affect optimal human body function will be introduced. It also deals with basic biomechanics of musculoskeletal system.

School Science

Discipline Human Biology

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/) page.

Level Undergraduate Level 1 subject

**Equivalent Subjects** LGYA 7033 - Human Medical Sciences 1 LGYA 5170 - Physical and Biological Sciences 1 LGYB 7586 - Human Biology 1 BIOS 1023 - Introduction to Human Biology (WSTC) BIOS 1022 - Introduction to Human Biology

Incompatible Subjects NATS 1013 - Introduction to Anatomy BIOS 1025 - Introduction to Physiology

## **Learning Outcomes**

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

- Define and use the scientific and medical terminology of anatomy and physiology to accurately describe the location and function of organs and organ systems of the human body;
- 2. Describe the levels of structural organisation of the human body;
- Identify the structure and function of different tissue types and organs;
- 4. Explain the basic anatomy and physiology of the major body systems including integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive systems
- 5. Determine the environmental and personal health practices affecting optimal function of human body;
- 6. Describe the biomechanics of human musculoskeletal system.

# **Subject Content**

1. Scientific and medical terminology in anatomy and physiology

2. Levels of structural organisation of human body

3. Gross structure and function of major organ systems of human body as listed below. Where appropriate, environmental factors and personal health practices affecting optimal function of human body

- (a) The integumentary system
- (b) The skeletal system
- (c) The muscular system

- (d) The nervous system
- (e) The endocrine system
- (f) The cardiovascular system
- (g) The lymphatic system and immunity
- (h) The respiratory system
- (i) The digestive system
- (j) The urinary system
- (k) The reproductive system
- 4. Biomechanics of human musculoskeletal 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.

Туре	Length	Percent	Threshold	Individual/ Group Task
Quiz	10 quizzes. 30 minutes/ quiz	30	Ν	Individual
Participation	10 weeks	10	Ν	Individual
Case Study	500 words	20	Ν	Individual
Final Exam	2 hours	40	Ν	Individual

#### Summer

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.

Туре	Length	Percent	Threshold	Individual/ Group Task
Quiz (4.3% each)	7 quizzes. 45 minutes/quiz		Ν	Individual
Participation	9 weeks	10	Ν	Individual
Case Study	500 words	20	Ν	Individual
Final Exam	2 hours	40	Ν	Individual

Prescribed Texts

 Tortora, G.J., Derrickson, B., Burkett, B., et al. (2018). Principles of anatomy and physiology (2nd Asia-Pacific ed.), John Wiley & Sons.

**Teaching Periods** 

# Summer A (2022)

### Campbelltown

Day Subject Contact Srinivas Nammi (https:// directory.westernsydney.edu.au/search/name/Srinivas Nammi/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject\_code=BIOS1035\_22-SUA\_CA\_D#subjects)

### Autumn (2022) Campbelltown Day

Subject Contact Srinivas Nammi (https:// directory.westernsydney.edu.au/search/name/Srinivas Nammi/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject\_code=BIOS1035\_22-AUT\_CA\_D#subjects)

### Penrith (Kingswood)

#### Day

Subject Contact Srinivas Nammi (https:// directory.westernsydney.edu.au/search/name/Srinivas Nammi/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject\_code=BIOS1035\_22-AUT\_KW\_D#subjects)

#### Online

#### Online

Subject Contact Srinivas Nammi (https:// directory.westernsydney.edu.au/search/name/Srinivas Nammi/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject\_code=BIOS1035\_22-AUT\_ON\_O#subjects)

### Sydney City Campus - Term 2 (2022) Sydney City

#### Day

Subject Contact Andrey Zheluk (https:// directory.westernsydney.edu.au/search/name/Andrey Zheluk/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject\_code=BIOS1035\_22-SC2\_SC\_D#subjects)

### Autumn (2023) Campbelltown

**On-site Subject Contact** Srinivas Nammi (https:// directory.westernsydney.edu.au/search/name/Srinivas Nammi/)

View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject\_code=BIOS1035\_23-AUT\_CA\_1#subjects)

### Penrith (Kingswood)

#### On-site

Subject Contact Srinivas Nammi (https:// directory.westernsydney.edu.au/search/name/Srinivas Nammi/)

View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject\_code=BIOS1035\_23-AUT\_KW\_1#subjects)

### Online

#### Online

**Subject Contact** Srinivas Nammi (https:// directory.westernsydney.edu.au/search/name/Srinivas Nammi/)

View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject\_code=BIOS1035\_23-AUT\_ON\_2#subjects)

# Sydney City Campus - Term 1 (2023)

### Sydney City

On-site

Subject Contact Andrey Zheluk (https:// directory.westernsydney.edu.au/search/name/Andrey Zheluk/)

View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject\_code=BIOS1035\_23-SC1\_SC\_1#subjects)

# Sydney City Campus - Term 2 (2023)

### Sydney City

**On-site Subject Contact** Andrey Zheluk (https:// directory.westernsydney.edu.au/search/name/Andrey Zheluk/) View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject\_code=BIOS1035\_23-SC2\_SC\_1#subjects)