NATS 0006 FUNDAMENTALS OF HEALTH SCIENCE (WSTC PREP)

Credit Points 10

Legacy Code 700190

Coordinator Ryan Sidoti (https://directory.westernsydney.edu.au/search/name/Ryan Sidoti/)

Description The depth of knowledge and practical skills required by health professionals in the 21st century is very different to that which was required in the past. Medical treatment of illness and disease has become increasingly technical and health professionals are expected to work in partnership in determining patient care. In order to achieve this, today's health professional must have a basic understanding of the fundamental scientific principles behind health and disease. Increasingly, modern health science is concerned with maintaining health as a way of preventing disease and this is achieved through a holistic approach to the human condition. This subject is an introduction to the basic concepts in human body systems, health and disease, that is required in order to commence any tertiary health science course.

School Western Sydney The College

Discipline Natural and Physical Sciences, Not Elsewhere Classified.

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 0 Preparatory subject

Equivalent Subjects NATS 0016 - Science for Health Professionals (UWSC) NATS 0018 - Science for Health Science (UWSCFS)

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

Restrictions

Students must be enrolled at Western Sydney University, The College.

Learning Outcomes

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

1. Use and interpret a wide range of biological and scientific terms describing the structure, function and location of human body systems.
2. Use and interpret information about the interdependence of human body systems and their components.
3. Interpret and implement information related to health and safety.
4. Describe factors that contribute to healthy functioning of the body.
5. Critically evaluate health-related information and evidence.

Subject Content

Topic 1:Cell structure and function
1.Prokaryotic and eukaryotic cells
2.Eukaryotic cell organelles? structure and function
Topic 2:Introduction to Body Systems
1.Overview of human body systems
2.Cardiovascular and respiratory systems
3.Musculo-skeletal system
4.Endocrine system
5.Digestive system
6.Integumentary system
7.Lymphatic system
8.Nervous system, including sensory systems (eye and ear)
9.Special senses (vision, hearing, smell, taste, equilibrium)
10.Immune system
11.Reproductive system
Topic 3:Reproduction and Genetics
1.Cell division
2.Introduction to DNA, genes and proteins
3.Simple genetics in health and disease
Topic 4:Homeostasis?Interdependence of body systems
1.Maintaining body temperature
2.Maintaining fluid and electrolyte balance
3.Maintaining blood pressure
Topic 5:Health and Disease
1.Nutrition
2.Physical and mental activity
3.Infectious disease and protection from infection
4.Vaccination and immunisation
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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
Portfolio	200 – 250 words	10	N	Individual
Portfolio	500 words	25	N	Individual

Intra-session Exam	1 hour	30	N	Individual
Presentation	6 - 7 minutes	35	N	Individual

Teaching Periods

Term 1 (2022)

Nirimba Education Precinct

Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS0006_22-T1_BL_D#subjects)

Term 2 (2022)

Nirimba Education Precinct

Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS0006_22-T2_BL_D#subjects)

Term 1 (2023)

Nirimba Education Precinct

On-site

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View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=NATS0006_23-T1_BL_1#subjects)

Term 2 (2023)

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