



Faculty of Medicine

SJSE11, The Human Being - Biology and Health, 19 credits

Människan - Biologi och hälsa, 19 högskolepoäng

First Cycle / Grundnivå

Details of approval

The syllabus was approved by Board of Health Sciences Education on 2013-06-27 and was last revised on 2014-06-13. The revised syllabus applies from 2014-09-01, autumn semester 2014.

General Information

The course is included as a compulsory component of the Bachelor of Science programme in Nursing comprising 180 credits, but is also offered as a freestanding course. The course complies with the guidelines of the Higher Education Ordinance (SFS 1993:100).

Some components may be in English.

Main field of studies

Medicine

Depth of study relative to the degree requirements

G1N, First cycle, has only upper-secondary level entry requirements

Learning outcomes

Knowledge and understanding

On completion of the course, the students shall be able to

- provide a systematic account of topographic anatomy
- account for the healthy and the injured cell, and the adaptation of cells to tissue damage
- explain how and why cells communicate with each other via nerves and hormones
- account for the basic elements of normal mobility and stability related to the musculoskeletal system

- identify factors that affect the cardiovascular function and explain how cardiovascular impairments manifest themselves
- explain the importance of the immune system for human health
- identify factors that affect the respiratory function by comparing the ventilation and respiration process
- identify factors that affect nutrition and relate them to normal digestion including absorption and metabolism of carbohydrates, proteins and fat
- explain the normal physiology of defecation and identify factors that affect defecation
- explain the normal physiology of the process from urine production to micturition and identify common causes to urinary tract disorders
- identify factors that affect the fluid, electrolyte and acid/base balance in relation to the function, distribution and transfer of fluids and electrolytes in the body
- describe the processes involved in nociception and how pain relief measures can affect each process
- account for commonly occurring microorganisms and for their ways of spreading and their effects on health and ill health
- explain links between different groups of medicines and their expected effect in the body.
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Competence and skills

On completion of the course, the students shall be able to

- make relevant use of medical terminology
- in an organised manner and in groups. teach fellow students about variations in normal body temperature, pulse, respiration and blood pressure and relate these to different ages in the life cycle.
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Judgement and approach

On completion of the course, the students shall be able to

- reflect on basic anatomical and biological differences related to gender and age.
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Course content

Anatomy

Normal physiology

Basic pathophysiology

Microbiology and hygiene

Pharmacology

Course design

The teaching and learning activities are designed so as to enable students to develop a specialised understanding and are characterised by an active search for knowledge, problem solving, reflection and critical analysis. Among the work methods used are independent study, skills training, group work, peer review, seminars and lectures.

Assessment

At re-examination, individual examination may replace group examination. Absence from compulsory learning activities may require alternative learning activities.

One examination and two opportunities to retake the examination are arranged for each assessed component. Students who do not achieve a pass on any of these occasions will be able to retake the examination on a later occasion. There are six opportunities for re-examination of each assessed component. A student who has failed an examination six times must discontinue his or her studies.. A student who has failed an examination on a course twice is entitled to request that another examiner be appointed by the programme director.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass.

For a pass on the course, the student must have passed all the assessed components.

Entry requirements

General and courses corresponding to the following Swedish Upper Secondary School Programs: Mathematics 2, Science 2, and Social Studies 1b/1a1+1a2. (Biology 1+Chemistry 1+Physics 1a/1b1+1b2 equals Science 1+2)

Subcourses in SJSE11, The Human Being - Biology and Health

Applies from H13

- 1301 The Muscoskeletal System, 1,5 hp
Grading scale: Fail, Pass
Assessed seminar, oral in groups with individual assessment.
- 1302 Anatomy, the Normal Physiology and Pathophysiology I, 4,5 hp
Grading scale: Fail, Pass
Individual written exam.
- 1303 Anatomy, the Normal Physiology and Pathophysiology II, 5,5 hp
Grading scale: Fail, Pass
Individual written exam.
- 1304 Microbiology and Hygiene, 3,0 hp
Grading scale: Fail, Pass
Assessed seminar, oral in groups with individual assessment and individual written exam
- 1305 Pharmacology, 3,0 hp
Grading scale: Fail, Pass
Individual written exam.
- 1306 Anatomy, the Normal Physiology and Pathophysiology III, 1,5 hp
Grading scale: Fail, Pass
Assessed seminar, oral in groups with individual assessment.