

Faculty of Medicine

# SJSB41, The Human Being - Biology and Health, 19.5 credits Människan - Biologi och hälsa, 19,5 högskolepoäng First Cycle / Grundnivå

# Details of approval

The syllabus was approved by The Nursing, Radiography, and Reproductive, Perinatal and Sexual Health Programmes Board on 2020-04-02 and was last revised on 2021-02-08. The revised syllabus comes into effect 2021-02-08 and is valid from the spring semester 2021.

# General information

The course is included as a compulsory component of the Bachelor's 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).

*Language of instruction:* Swedish Some course components may be in English.

Main field of study	Specialisation
Medicine	G1N, First cycle, has only upper-secondary level entry requirements

# Learning outcomes

### Knowledge and understanding

On completion of the course, students shall be able to

- give an account of the microscopic and the macroscopic anatomy
- give an account of the structure of the cell and explain the properties of the cell structures that are relevant for the integrity and functions of the cell
- give an account of the physiological processes in the organ systems of the body
- describe basic pain physiology processes

- identify factors that influence water, electrolyte and acid-base balance in relation to the function, distribution and transfer of water and electrolytes in the body
- explain the importance of the immune system for human health
- give an account of commonly occurring microorganisms and how they spread and affect health and illness, including nosocomial infections
- give an account of general pharmacological concepts regarding dynamics kinetics, interactions, side effects and the link between them as well as describe efficacy variations in drug treatments
- describe different methods of administration and dosage forms for drugs.

#### Competence and skills

On completion of the course, students shall be able to

- use medical terms and concepts in a relevant way
- use FASS and be able to explain the laws and regulations governing the nurse's work on safe drug management
- apply regional and national guidelines and procedures relating to hygiene practices in healthcare and the prevention of disease transmission
- analyse normal variations and deviations in body temperature, pulse rate, respiration, oxygen saturation and blood pressure and relate these to different ages in the life cycle.

#### Course content

Anatomy and physiology

- Cells and tissues
- Basic genetics
- The nervous system and sensory organs
- The endocrine system
- The musculoskeletal system
- The circulatory system
- The blood and coagulation system
- The immune system
- The respiratory system
- The digestive system
- Renal function and urinary tract
- The fluid and acid-base balance
- The reproductive system

General pathophysiology

Microbiology and hygiene

General pharmacology

# Course design

The following working methods are used: Individual work, group assignment, peer review, seminars and lectures.

### Assessment

All assessment is carried out individually, based on established criteria. One regular exam and two resits are organised for each exam/course component. Students who do not achieve a Pass grade during any of these instances have the opportunity to take additional examinations. Students who fail in two examination sessions can request a change of examiner. In the case of a resit, an individual exam may replace a group exam.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

# Grades

Grading scale includes the grades: Fail, Pass For a grade of Pass, the student must pass all exams/course 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)

# Further information

The courses are carried out in the order they are given.

#### Transition provisions

Passed assessed components in SJSH11 - The Human Being - Biology and Health, 19 credits, VGSSK, the Nursing programme, has corresponding content and can, following the granting of an application, be credited as follows:

 1801 Anatomy, normal physiology, pathophysiology and microbiology, 7.5 credits

(corresponds to 2001 Anatomy, normal physiology, pathophysiology and microbiology, 7.5 credits)

- 1802 Anatomy, normal physiology and pathophysiology, 5.5 credits (corresponds to 2002 Anatomy, normal physiology and pathophysiology, 6 credits)
- 1803 Microbiology and hygiene, 1.5 credits (corresponds to 2003 Microbiology and hygiene, 1.5 credits)
- 1804 General pharmacology, 3 credits (corresponds to 2004 General pharmacology, 3 credits)
- 1805 Vital parameters, 1.5 credits (corresponds to 2005 Vital parameters, 1.5 credits)