Course syllabus for

Pathophysiology, 8 credits

Sjukdomslära, 8 hp
This course syllabus is valid from spring 2023.
Please note that the course syllabus is available in the following versions:
Spring2019 , Spring2022 , Spring2023 , Spring2025

Course code	1RS038
Course name	Pathophysiology
Credits	8 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Not applicable
Level	GX - First cycle
Grading scale	Pass, Fail
Department	Department of Clinical Science, Intervention and Technology
Decided by	Utbildningsnämnden CLINTEC
Decision date	2018-10-16
Revised by	Education committee CLINTEC
Last revision	2022-10-10
Course syllabus valid from	Spring 2023

Specific entry requirements

General entry requirements.
Mathematics 2a/2b/2c, Science 2, Social studies 1b/1a1+1a2 (field-specific entry requirements A14).
Or: Mathematics B, Science B, Social studies A (field-specific entry requirements 16).

Objectives

On completion of the course, the student should be able to:

- describe some global public health problem
- explain underlying prevention and causes i.e. aetiology and genesis mechanisms to diseases based on scientific grounds
- describe basic pathological conditions and how they influence the body function i.e. pathophysiology, in commonly occurring acute or chronic diseases and the symptoms for these disease
- based on the clinical picture give examples of diagnostic methods and treatments based on evidence
- account for laboratory analyses that can be related to future professional work

Content

This course is based on a scientific basis where pathological conditions throughout the body are studied with emphasis on diseases that can be diagnosed in Image and Function, radiology. The course also includes a global health perspective where students are given the opportunity to reflect and discuss global health issues with fellow students from other X-ray nursing programs in Sweden. The course is divided into the following parts:

Global Health perspective, 0.5 hp

Grading scale: GU

Aim with component is that students should be able to describe global health problems and socio-cultural factors that influence people' living conditions.

General pathology, 1.0 hp

Grading scale: GU

During component are studied cell lesion cell death inflammation and healing because students should be able to describe basic lesions and how these influence body's function.

Heart disease, 1.0 hp

Grading scale: GU

Students should in this component can account for prevention and underlying causes i.e. aetiology and genesis mechanisms to diseases in heart and vascular system. Student should also can give examples of diagnostic methods and laboratory analyses based on clinical picture. Examples of diseases that affect this section are, for example, myocardial infarction, arteriosclerosis and aneurysm

Pulmonary diseases, 1.0 hp

Grading scale: GU

Students should in this component can account for prevention and underlying causes i.e. aetiology and genesis mechanisms to infectious diseases obstructive lung diseases and tumours in lungs. Student should also can give examples of diagnostic methods and laboratory analyses based on clinical picture.

Diseases of the central and peripheral nervous system, 1.5 hp

Grading scale: GU

Students should in this component can account for underlying causes i.e. aetiology and genesis mechanisms to degenerative . diseases, cerebrovascular conditions, epilepsy, MS and tumors as well as certain diseases of the endocrine system. Student should also can give examples of diagnostic methods and laboratory analyses based on clinical picture.

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Urinary tract diseases, 0.5 hp

Grading scale: GU

Students should in this component can account for underlying causes i.e. aetiology and genesis mechanisms to diseases in urinary tract. Student should also can give examples of diagnostic methods and laboratory analyses based on clinical picture.

Injury disorders, 1.0 hp

Grading scale: GU

In this part, the students must be able to account for the underlying causes, ie. etiology, and mechanisms of origin of diseases of the abdominal organs, which also include some endocrine disease states. Examples of diseases are bleeding, inflammatory processes and tumors. Student should also can give examples of diagnostic methods and laboratory analyses based on clinical picture

Orthopedics, 1.5 hp

Grading scale: GU

Students should in this component can account for underlying causes i.e. aetiology and genesis mechanisms to diseases and trauma in locomotive organs such as fractures and degenerative changes and tumours. Student should also can give examples of diagnostic methods based on clinical picture.

Teaching methods

The course uses, among other things, the pedagogical method flipped classroom, where the student, based on instructions, prepares for lectures and seminars within the course.

In the case of compulsory training elements, the course coordinator assesses how absence can be remedied. Before the student has participated in the compulsory educational elements or taken up absence in accordance with the course coordinator's instructions, the study results cannot be approved.

Examination

Course is assessed through written individual examination. To pass course is required approved result on all included components..

Student who is not passed after regular examination have the right to participate at further five examinations. In connection to the course three occasions will be given One within the course, one during the following re-examination. The third opportunity is provided before the beginning of the next semester, or in close connection to that. In certain cases, it is required that the student submits an exemption application before he/she get the results of his/her latest completed examination. Three more opportunities will be provided as described above when the course is run next time.

If student implemented six failed examinations are given no additional examination. As examination, the times been counted student participated in one and the same test. Submission of blank exam is counted as examination. Examination to which student registered but not participated be counted not as examination.

If there are special grounds, or a need for adaptation for a student with a disability, the examiner may decide to deviate from the syllabus's regulations on the examination form, the number of examination opportunities, the possibility of supplementation or exemptions from the compulsory section of the course etc. Content and learning outcomes as well as the level of expected skills, knowledge and abilities may not be changed, removed or reduced.

Transitional provisions

The student may be examined according to a previous syllabus within a year after the date when a close-down or major changes of the course was decided.

Other directives

Course evaluation will be carried out in accordance with the guidelines established by the Committee for

Higher Education at Karolinska Institutet.

Literature and other teaching aids

Medicinboken : orsak, symtom, diagnostik, behandling
Grefberg, Nils

5., [rev.] uppl. : Stockholm : Liber, 2013 - 704 s.
ISBN:9789147105816 (inb.) LIBRIS-ID:14678372
Library search

Kirurgiska sjukdomar
Andersson, Roland; Regnér, Sara; Rogmark, Cecilia

Tredje upplagan : Lund : Studentlitteratur AB, 2021 - 418 sidor
ISBN:9789144137254 LIBRIS-ID:3hcskq011wrldr8b
Library search

Brehmer-Andersson, Eva
Allmän patologi : en introduktion

4. uppl. : Lund : Studentlitteratur, 2011 - 199 s.
ISBN:978-91-44-05584-8 LIBRIS-ID:12189853
Library search

Vilhelmsson, Andreas; Tengland, Per-Anders
Global folkhälsa : om livsvillkor, sjukdomar och social rättvisa

1. uppl. : Lund : Studentlitteratur, 2016 - 295 s.
ISBN:9789144076942 LIBRIS-ID:19434544
Library search