



**Karolinska
Institutet**

Course syllabus for

Pathophysiology, 8 credits

Sjukdomslära, 8 hp

This course syllabus is valid from spring 2019.

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	Education committee CLINTEC
Decision date	2018-10-16
Course syllabus valid from	Spring 2019

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

Course starts with a global health perspective where students are given possibility to discuss global health issues. Based on disciplinary foundation is studied pathological conditions where emphasis come to lie at diseases that can diagnose at radiological clinic. Starting point is pathological conditions of the adult individual and condition that have importance for treatment of patient in connection with radiological study.

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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's 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 are studied are both artery that vein diseases and respect heart heart attack and changes in heart

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 changes, MS, infarction, bleedings and tumours. Student should also can give examples of diagnostic methods and laboratory analyses based on clinical picture.

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

Students should in this component can account for underlying causes i.e. aetiology, genesis mechanisms to diseases in liver, biliary tracts and pancreas as well as thick and small intestine. 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

Course come to utilise the educational method so called Flipped classroom where student based on instructions prepare before lectures and seminars that are in course.

Course Coordinator assesses about and if so how absence from compulsory education can be recovered. Before student participated in the compulsory elements or recovered absence in accordance with the instructions of Course Coordinator can not learning outcomes be reported.

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.

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 Board of Education at Karolinska Institutet.

Literature and other teaching aids

Ericson, Elsy; Ericson, Thomas

Medicinska sjukdomar : patofysiologi, omvårdnad, behandling

4., rev. och utök. uppl. : Lund : Studentlitteratur, 2012 - 752 s.

ISBN:978-91-44-07008-7 (inb.) LIBRIS-ID:12684167

URL: [Extra material](#)

[Library search](#)

Järhult, Johannes; Offenbartl, Karsten

Kirurgiboken : vård av patienter med kirurgiska, urologiska och ortopediska sjukdomar

Wilhelmsson, Jan

4., rev. och uppdaterade uppl. / b [illustrationer: AB Typoform/Jan Wilhelmsson] : Stockholm : Liber, 2006 - 604 s.

ISBN:91-47-05336-4 (inb.) LIBRIS-ID:10162746

URL: <http://www2.liber.se/bilder/omslag/100/4705336o.jpg>

[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

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