

DEPARTMENT OF PHYSIOLOGY AND PHARMACOLOGY

C3F5253 Human Physiology - distance course, 3 credits (hec)

Människans fysiologi - distanskurs, 3 högskolepoäng

Third-cycle level / Forskarnivå

Approval

This syllabus is approved by the The Committee for Doctoral Education on 2023-12-07, and is valid from Spring semester 2024.

Responsible department

Department of Physiology and Pharmacology, Faculty of Medicine

Prerequisite courses, or equivalent

No prerequisite courses, or equivalent, demanded for this course.

Purpose & Intended learning outcomes

Purpose

KI is a medical university with research and education in medicine and health. All PhD students have to obtain basic knowledge regarding the human body in health and disease in case they lack basic higher education knowledge in the field of medicine.

The aim of the course is to give PhD students without a medical background a basic overview and introduction to human physiology. The students will gain a basic understanding of how the human organ systems function and interact under normal conditions. The content covered in this course will be useful for further studies where knowledge about human biology is of value and can hopefully add value to the PhD project and beyond.

Intended learning outcomes

After completing the course, the student will have gained a basic understanding of how the human organ systems function and interact under normal conditions.

More specifically, the student will be able to:

- Demonstrate knowledge and understanding of basic functions and interactions between organ

systems in the human body.

- Demonstrate a critical and scientific approach to literature sources for the different course tasks.

Course content

The course will cover the following areas within human physiology:

- Overview of cellular and integrative physiology
- Basic anatomy
- Biochemistry and cell biology
- Nervous system
- Endocrinology
- Digestive system
- Cardiovascular physiology
- Renal physiology
- Respiration
- Basic immunology

Forms of teaching and learning

The course is given as a distance course on the course platform used at KI and through online seminars and lectures.

For each area there will be recorded lectures, study questions, quizzes and live occasions. There will also be asynchronous group discussions and seminars.

Language of instruction

The course is given in English.

Grading scale

Pass (G) /Fail (U)

Compulsory components & forms of assessment

Compulsory components

The students need to participate in group discussions and send in seminar assignments during the course.

If absent or if assignments are not sent in, a new deadline will be issued.

Forms of assessment

The learning outcomes are examined with a project presentation and a written online test. Students that are absent from the examinations or do not obtain a passing grade in the first examination will be offered a second examination.

Course literature

Recommended literature:

Medical Physiology

Boron, Walter F.; Boulpaep, Emile L.

Update 3 ed.: Philadelphia, Pa: Saunders Elsevier, cop, 2016 - xii

ISBN: 9780323427968

This book is very extensive, only parts will be covered in the course. Can be used to look up relevant information.

Aldskogius, Håkan; Rydqvist, Bo Den friska människan: anatomi och fysiologi. Första upplagan: Stockholm: Liber, [2018] - 476 sidor ISBN:9789147105694 LIBRIS-ID:21774685 In Swedish.

Optional literature:

Medical physiology

Rhoades, Rodney A.; Tanner, George A.

2. ed.: Philadelphia: Lippincott Williams & Wilkins, cop. 2003 - 781 s.

ISBN:0-7817-1936-4 LIBRIS-ID:8871240

Color Atlas of Physiology

Despopoulos A.; Silbernagl S.

6th [rev.] ed.: Thieme, pp 1-456, 2008

ISBN: 9783135450063 LIBRIS-ID:16371845 (electronic)

Physiology

Costanzo Linda S.

4th ed.: Philadelphia, PA: Saunders Elsevier, pp 1-493, 2010

ISBN:978-1-4160-6216-5 LIBRIS-ID:11768941