



KURSPLAN

Introduction to Medical Sciences - Bridging Course, 15 högskolepoäng

Introduction to Medical Sciences - Bridging Course, 15 credits

Kurskod:	HIMR20	Utbildningsnivå:	Avancerad nivå
Fastställd av:	Utbildningsrådet 2020-05-14	Utbildningsområde:	Medicinska området
Reviderad av:	Avdelningschef 2024-06-17	Ämnesgrupp:	MT2
Gäller fr.o.m.:	Hösten 2024	Fördjupning:	A1N
Version:	3		

Lärandemål

Upon completion of the course the student should have the ability to:

Kunskap och förståelse

- describe human surface anatomy
- describe the human musculoskeletal system
- describe and explain basic human pathophysiology in relation to assistive technology
- describe the fundamental movements of joints and the muscles that create movement
- describe basic biomechanical principles in relation to mobility and assistive technology
- describe common impairments related to the musculoskeletal system
- demonstrate an understanding of the cultural, medical and psychological aspects of living with an impairment
- describe common neurological impairments
- explain the consequences of different assistive technology interventions on body functions and structures.

Färdighet och förmåga

- apply common classification systems for health and wellbeing, health interventions and diagnosis.

Värderingsförmåga och förhållningssätt

- appreciate the ethical implications of working with individuals with a functional variation.

Innehåll

- medical terminology
- a biopsychosocial perspective of disability
- musculoskeletal, nervous, circulatory, integumentary system
- orthopaedic impairments
- neurological impairments
- biomechanics of normal and pathological movement
- patients' professional interaction and ethics

- common disease processes that lead to functional impairment
- the human life cycle
- classifications of health and health interventions and diagnosis
- consequences of assistive technology provision on health and wellbeing

Delkurs 1, 0,0 hp

Undervisningsformer

The course is implemented through lectures, group work and field studies.

Undervisningen bedrivs på engelska.

Förkunskapskrav

The applicant must hold the minimum of a Bachelor's degree or equivalent (i.e. the equivalent of 180 ECTS credits at an accredited university) in mechanical engineering. Proof of English proficiency is required.

Examination och betyg

Kursen bedöms med betygen A, B, C, D, E, FX eller F.

Examination of the course will be based upon two individual written exams and seminars. A senior lecturer serves as examiner for the course.

In individual written examination Fx will not be applied.

Poängregistrering av examinationen för kursen sker enligt följande system:

Examinationsmoment	Omfattning	Betyg
Individual written exam I	4,5 hp	A/B/C/D/E/FX/F
Individual written exam II	4,5 hp	A/B/C/D/E/FX/F
Seminars	6 hp	U/G

Kurslitteratur

Tortora, G. J., & Derrickson, B. (2019). *Introduction to the Human Body*. (11th edition, EMEA edition ed.). Wiley

or

VanPutte, C. L., Seeley, R. R., Regan, J.L., & Russo, A. F. (2021). *Seeley's Essentials of Anatomy and Physiology* (Eleventh edition, International student edition ed.). McGraw-Hill.

Together with one of the atlases of anatomy below:

Dauber, W., & Feneis, H. (2007). *Pocket Atlas of Human anatomy: Founded by Heinz Feneis* (5., rev. ed.). Thieme

or

Lippert, L. (2023). *Clinical kinesiology and anatomy* (Seventh edition). F.A. Davis.

The latest edition of the course literature shall be used.