

SYLLABUS

Medical Science in Anesthesia Care 7.5 credits B7003H

Medicinsk vetenskap inom anestesijukvård

Course syllabus admitted: Autumn 2022 Sp 1 - Present

**DECISION DATE
2022-10-17**

Medical Science in Anesthesia Care 7.5 credits B7003H

Medicinsk vetenskap inom anestesijukvård

Second cycle, B7003H

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	U G VG	Medicinsk vetenskap	Medicine

Entry requirements

Bachelor Degree in Nursing

Selection

Examiner

Åsa Engström

Course Aim

After completion of their course, the student should be able to:

- Account for illnesses/conditions among children and adults in anaesthesia care, and explain and report on their causes and treatment
- Analyse, reflect on and, in collaboration with medical expertise, assess and apply anaesthesia care in accordance with scientifically established methods
- Explain and assess fluid & electrolyte and acid-base balances
- Explain and understand basic intensive care
- Explain and account for cardiological conditions
- Explain and understand pharmacological principles regarding pharmaceuticals used in anaesthesia care
- Apply knowledge in quantitative research methods for data gathering and analysis in the field of anaesthesia care

This knowledge forms a basis for future nursing and placement courses and is a precondition for providing secure nursing and patient safety in your future profession as a nurse anaesthetist.

Contents

- Anaesthesia nursing administered to children and adults, including fluid & electrolyte and acid-base balance, intensive care and pharmacology.
- Acute pediatrics
- Acute obstructive
- Cardiology
- Scientific methodology

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

The contents of the course elements and its teaching methods are specifically tailored for the nurse anaesthetist profession. The teaching methods vary with individual studies, individual work or group work, lectures, simulation and seminars. Different working methods stimulate active knowledge acquisition, group discussions and reflection. Seminars and lab work constitute obligatory elements. As support for the individual studies the students are offered lectures via distance-spanning technology. The studies are carried out by means of detailed objectives and instructions which can be found in the study guide of the course.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. Examination for the course consists of an individual written exam, a take-home examination and/or a seminar.

Remarks

Examination for the course consists of an individual written exam, a take-home examination and/or a seminar.

Literature. Valid from Autumn 2022 Sp 1

*Björk, J. (Senaste upplagan). Praktisk statistik för medicin och hälsa. (1. uppl.) Stockholm: Liber
Calvey, T.N. & Williams, N.E. (2009). Principles and Practice of Pharmacology for Anaesthetists [Elektronisk resurs]. (5th ed.) Chichester: John Wiley & Sons, Ltd.

Hampton, J. & Hampton, J. (senaste upplagan). EKG på enkelt sätt. Lund: Studentlitteratur

*Henricson, M. (red.) (Senaste upplagan). Vetenskaplig teori och metod: från idé till examination inom omvårdnad. Lund: Studentlitteratur.

Hovind, I.L. (red.) (Senaste upplagan). Anestesiologisk omvårdnad. Lund: Studentlitteratur

Lindahl, S., Winsö, O & Åkeson, J. (red.) (Senaste upplagan). Anestesi. Stockholm: Liber.

*Norlén, P. & Lindström, E. (Red.) (Senaste upplagan). Farmakologi. Stockholm: Liber.

*Persson, J. & Stagmo, M. (senaste upplagan). Perssons kardiologi: hjärtsjukdomar hos vuxna. Lund: Studentlitteratur.

Zetterström, H. & Hahn, R. (senaste upplagan). Blodersättning och vätsketerapi: inom akutvård, anestesi, kirurgi och intensivvård. (Första upplagan). Lund: Studentlitteratur.

Scientific articles will be added

* Literature has been used in earlier courses

Course offered by

Department of Health, Education and Technology

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Assignment report and/or seminar Scientific methodology statistics	U G VG	1	Mandatory	A22	
0002	Exam Acute pediatrics	U G VG	1	Mandatory	A22	
0003	Exam in Cardiology/Heart failure	U G VG	0.8	Mandatory	A22	
0004	Exam Anaesthesia nursing	U G VG	3	Mandatory	A22	
0005	Seminar and/or assignment report	U G#	1.2	Mandatory	A22	
0006	Simulation anesthesiology	U G#	0.5	Mandatory	A22	

Syllabus established

by Anna Öqvist, Director of Undergraduate Studies at the Department of Health, Education and Technology 2022-10-17