

**SYLLABUS**

# **Interprofessional aspects of diagnosis and treatment of asthma, allergy and chronic obstructive pulmonary disease 15 credits M7084H**

**Interprofessionella aspekter på diagnostik och behandling av astma, allergi och kroniskt obstruktiv lungsjukdom (KOL)**

**Course syllabus admitted: Spring 2021 Sp 3 - Present**

**DECISION DATE**

**2020-02-21**

# Interprofessional aspects of diagnosis and treatment of asthma, allergy and chronic obstructive pulmonary disease 15 credits M7084H

Interprofessionella aspekter på diagnostik och behandling av astma, allergi och kroniskt obstruktiv lungsjukdom (KOL)

## Second cycle, M7084H

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

## Entry requirements

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## Selection

The selection is based on 30-285 credits

## Examiner

Johanna Sundbaum

## Course Aim

The learning outcomes for the course are for the student to have acquired knowledge and skills within diagnostics, treatment and follow-up of individuals with asthma, allergies and COPD. The students will also have further developed their ability to work based on evidence-based care and teamwork in pulmonary healthcare.

After having completed the course the student will be able to:

### *Knowledge and understanding*

- Describe and reflect on the prevalence and causal relationship of the onset of asthma, allergies and COPD
- Explain immunological mechanisms in allergy disease
- Explain and justify diagnostic methods for asthma, allergy and COPD
- Explain and justify pharmacological and non-pharmacological treatment strategies for asthma, allergy and COPD
- On basis of their own profession describe the content, planning and implementation of work with asthma, allergies and COPD clinics

### *Skills and abilities*

- Be able to systematically search, critically review and reference scientific literature in the field.
- Be able to independently apply national and international care and treatment recommendations.
- Be able to independently carry out, interpret and document screening and diagnostic tests such as FEV1/FEV6 measurements, Peak Expiratory Flow (PEF) measurements and dynamic spirometry.
- Be able to provide person-centric patient education, support for self-care and lifestyle changes, as well as be able to evaluate treatment outcomes.
- Be able to independently identify the need for multidisciplinary collaboration.
- Be able to plan, evaluate and report quality and improvement work.

### *Ability to evaluate and approach*

- Evaluate whether the care of individuals with asthma, allergies and COPD is evidence-based.
- Reflect on the consequences of asthma, allergies and COPD at both the individual and societal level.

## Contents

The course is divided into two components:

1) *Prevalence and diagnostics for asthma, allergies and COPD, 6.0 higher education credits*

The component addresses the prevalence, health and risk factors for asthma, allergies and COPD diseases, the onset and development of the diseases, as well as opportunities for prevention. The immunological mechanisms of allergy diseases are also addressed. The component also includes respiratory physiology, diagnostics, differential diagnosis, comorbidities, investigations, adequate examinations and tests such as FEV1/FEV6 measurement, PEF measurement, dynamic spirometry and allergy diagnostics. The relevant presentation of symptoms is also reviewed.

2) *Pharmacological and non-pharmacological treatment for asthma, allergy and COPD, 9.0 higher education credits*

The component addresses both pharmacological and non-pharmacological treatment and also includes patient education, support for self-care and person-centric care. The course component ends with an advanced study project in the form of an improvement project or a smaller literature review based on either their own profession or an interprofessional approach.

## Realization

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

The course activities are based on the active seeking of knowledge by the student. To support the learning process, web-based lectures and seminars are organised. Participation in seminars is compulsory. Achieving a Pass grade requires that all parts of the course have been completed and passed.

## 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. In order to demonstrate their knowledge, students will be examined on the following:

1. A written, individual unsupervised examination that covers the physiology of respiration, immunology, epidemiology, diagnostics and differential diagnostics.
2. Execution and interpretation of spirometry.
3. A written, individual unsupervised examination that covers pharmacological and non-pharmacological treatment.
4. Seminars via Zoom that include discussions on concepts related to asthma, allergies and COPD clinics.
5. An evidenced-based improvement project that is based on a person-centric approach for the purpose of reinforcing self-care for the individual with asthma, allergy or COPD. The assignment can be undertaken in pairs and presented both verbally and in writing via an opponent and respondent system in a seminar conducted in zoom.

## Literature. Valid from Spring 2021 Sp 3

Hedlin, G & Larsson, K. (2009). Allergi och astma. Lund: Studentlitteratur.

Larsson, K. (2014). KOL: kroniskt obstruktiv lungsjukdom. Lund: Studentlitteratur.

Läkemedelsverket. (2015). Läkemedelsbehandling vid astma - behandlingsrekommendation.

<https://lakemedelsverket.se/astma>

Läkemedelsverket. (2015). Kroniskt obstruktiv lungsjukdom (KOL) – behandlingsrekommendation.

<https://lakemedelsverket.se/KOL>

Socialstyrelsen. (2014). Nationella riktlinjer för vård vid astma och KOL. [www.socialstyrelsen.se](http://www.socialstyrelsen.se)

Scientific articles will be added.

Referenslitteratur:

Ekman, I. et al. (2014). Personcentrering i hälso- och sjukvård; från filosofi till praktik. Lund: Liber.

## Course offered by

Department of Health, Education and Technology

## Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Take-home examination	U G#	4	Mandatory	S21	
0002	Lung physiological tests	U G#	2	Mandatory	S21	
0003	Take-home examination	U G#	3	Mandatory	S21	
0004	Seminar	U G#	2	Mandatory	S21	
0005	Evidence based quality work with oral and written presentation	U G#	4	Mandatory	S21	

## Syllabus established

by Dean of Department of Health Sciences 2020-02-21