



**Karolinska  
Institutet**

Course syllabus for

## **Pharmacology and Pathology 1, 7.5 credits**

Farmakologi och sjukdomslära 1, 7.5 hp

This course syllabus is valid from autumn 2012.

Please note that the course syllabus is available in the following versions:

Autumn2012 , [Autumn2014](#) , [Autumn2015](#) , [Autumn2017](#) , [Autumn2020](#)

Course code	2DS005
Course name	Pharmacology and Pathology 1
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Not applicable
Level	AV - Second cycle
Grading scale	Pass, Fail
Department	Department of Laboratory Medicine
Decided by	Programnämnden 9
Decision date	2012-09-26
Course syllabus valid from	Autumn 2012

### **Specific entry requirements**

Qualification as a nurse certified by the National Board of Health and Welfare

### **Objectives**

On completion of the course, the student should be able to understand and apply general pharmacological principles and the legislation regulating the use of drugs.

This course should, together with Pharmacology and pathology part 2, lead to qualification requirements for a specialist nurse to apply for prescription right of drugs for patients according to the Swedish National Board of Health and Welfare's Regulation (2001:16) of qualification requirements in the prescription of drugs

The course is divided in two parts.

Part 1: General pharmacology, 4.5 higher education credits

On completion of the part, the student should be able to understand and apply pharmacodynamic and pharmacokinetic principles related to:

- origin of effects and side effects of drugs
- pharmaceutical form and administration methods
- age, sex and genetic variability, and environmental factors
- pregnancy and breast feeding

- relation between dose, concentration and the effect of drugs
- origin of adverse drug reactions, interactions and problems related to omitting drugs

Part 2: Drug-related legal framework, 3 higher education credits

A student should, on completion of the part, be able to analyse and apply:

- Pharmacy law (1992:859) and Pharmacy regulation (2006:272), and related regulations and general guidelines
- LVFSF 2001:12 The Medical Products Agency's regulations of security assurance of drugs
- The regulations and general guidelines of the Swedish National Board of Health and Welfare (SOSFS 2000:1) of drug management in the health care
- Regulation (SOFS 2001:16) of qualification requirements for nurses in the prescription of drugs
- The regulations of the Medical Products Agency (LVFS 1997:10) of the prescription and distribution of drug etc

Student should also be able to:

- describe and understand principles of clinical drug trials

## Content

Part 1: General pharmacology, 4.5 higher education credits.

The main contents of the part focus on pharmacodynamic respective pharmacokinetic principles.

Part 2: Drug-related legal framework, 3 higher education credits.

The main contents of the part consist of laws and regulations concerning drugs and drug management, including the nurse's drug prescription.

**General pharmacology, 4.5 hp** The main contents of the part focus on pharmacodynamic respective pharmacokinetic principles. **Drug-related legal framework, 3 hp** The main contents of the part consist of laws and regulations concerning drugs and drug management, including the nurse's drug prescription.

## Teaching methods

The course is IT-based and is characterised by independent and collaborative learning. Different working methods such as individual study assignments, work in groups, virtual discussions and seminars and lectures are used.

## Examination

Part 1: All the outcomes are examined through a written examination.

Student without approved results after three completed examinations may be offered to take the course once more. However, there are at most six examination opportunities for each course. Examination times are announced at the beginning of the course. In case of failure of a written group examination, written individual examinations are required as above.

Part 2: - Pharmacy law and Drug legislation and related regulations and general guidelines are examined by an individual written assignment.

- Other outcomes are examined at seminars.

In case of absence from seminars, a written complementary assignment should be submitted for approval according to the course director's instructions.

For a Pass in the course, the grade Pass is required in all parts.

## Other directives

Course evaluation takes place in accordance with the guidelines established by the Board of Education.

## Literature and other teaching aids

### **Enligt ordination : om bättre läkemedelsanvändning**

*Ihre, Thomas; Fastbom, Johan*

Lund : Studentlitteratur, 2005 - 140 s.

ISBN:91-44-03540-3 LIBRIS-ID:9889402

[Library search](#)

### **FASS**

senaste uppl. : Läkemedelsinformation AB,

URL: [www.fass.se](http://www.fass.se)

### **Receptföreskrifter : tolkningar och kommentarer**

3., [rev.] uppl. : Stockholm : Apotekarsocieteten, 2005 - 86 s.

ISBN:91-974318-8-5 (korr.) z 97-43-188-5 LIBRIS-ID:10004488

[Library search](#)

*Sjölenius, Bengt*

### **Delegering, läkemedel, ansvar : praktisk handbok**

5., [rev. och uppdaterade] uppl. : Lund : Studentlitteratur, 2004 - 379 s.

ISBN:91-44-02782-6 LIBRIS-ID:9208589

[Library search](#)

### **Vem får göra vad i hälso- och sjukvården och tandvården?**

Stockholm : Socialstyrelsen, 2004 - 20 s.

ISBN:91-7201-897-6 LIBRIS-ID:9692096

URL:

<http://www.socialstyrelsen.se/NR/rdonlyres/1B771FA3-F290-4CBE-B7A6-705DB19642B7/2671/200410>

[Library search](#)

### **Läkemedelsboken 2011-2012**

Uppsala : Läkemedelsverket, 2011 - 1269 s.

ISBN:978-91-979605-0-2 LIBRIS-ID:12199360

[Library search](#)

*Aarbakke, Jarle; Simonsen, Terje*

### **Illustrerad farmakologi 1 : Principer och tillämpningar**

2. uppl. : Natur & Kultur, 2011

ISBN:91-27-12206-9 (inb.) LIBRIS-ID:12069102

[Library search](#)

### **Författningshandbok för personal inom hälso- och sjukvården. Författningshandbok 2011 för personal inom hälso- och sjukvård**

*Raadu, Gunnel*

42. uppl. : Stockholm : Liber, 2011 - 824 s.

ISBN:91-47-10359-0 LIBRIS-ID:12072073

[Library search](#)