



**Karolinska  
Institutet**

Course syllabus for

## **From Atom to Organism, 3 credits**

Från atom till organism, 3 hp

This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.

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

Autumn2011 , Autumn2012 , Autumn2013

Course code	1BA057
Course name	From Atom to Organism
Credits	3 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Not applicable
Level	GX - First cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Laboratory Medicine
Decided by	Programnämnd 6 (Biomedicinsk analytiker- och Röntgensjuksköterskeprogrammen)
Decision date	2011-03-17
Revised by	Programnämnd 6 (Biomedicinsk analytiker- och Röntgensjuksköterskeprogrammen)
Last revision	2012-05-09
Course syllabus valid from	Autumn 2012

## **Objectives**

The student should acquire knowledge on how different components build cells and tissues, using man as model organism, as well as understanding on how these communicate to organize, control and maintain a tissue/organism.

After passed course the student should be able to synoptically explain:

- How life started, self-organization and biological organization
- Molecular processes necessary for the life, where these take place and their basic function
- Structure and function for the cell and its organelles as well as cell events
- How tissues are organized, constructed and maintained
- The human body plan
- How diseases develop in humans (introduction to general pathology)

## **Content**

During the course the student works to acquire her/his own knowledge in the field of the course from what the universe is composed of and that everything is chemistry, through the definition of life and what it consists of to the building blocks of the organism and how diseases develop in organisms.

As a help the student has access to introductory lectures, performs groupwork with other students and attends seminars with supervisor where the student meets the supervisor in smaller student groups to discuss information/knowledge acquired during the course. The final part of the course is a written examination.

## Teaching methods

Lectures, group work and seminars with supervisor.

## Examination

A written examination completes the course.

To pass the course the student needs to pass the written examination and participate in compulsory moment.

In case of absence an agreement concerning compensation is made between the student and the responsible teacher. One re-examination is given in connection to the course and during a re-examination week in August. Students who have not passed the regular examination are entitled to participate in five more examinations. If the student is not approved after four examinations, he/she is recommended to retake the course at the next regular course date and may, after that, participate in two more examinations.

## Transitional provisions

Examination according to this syllabus will be provided during one year after decision to abolish the course or revision of the syllabus.

## Other directives

Course evaluation will be carried out in accordance with the guidelines established by the Board of Education.

## Literature and other teaching aids

*Erlanson-Albertsson, Charlotte; Gullberg, Urban*

### **Cellbiologi**

2., [rev. och uppdaterade] uppl. : Lund : Studentlitteratur, 2007 - 350 s.

ISBN:978-91-44-04738-6 LIBRIS-ID:10532220

[Library search](#)

*Lindskog, Bengt I.*

### **Medicinsk miniordbok**

*Frank, Urban*

6., [omarb. och utvidgade] uppl. : Stockholm : Nordiska bokh., 2003 - 492 s., xvi pl.-s. i färg

ISBN:91-516-0090-0 LIBRIS-ID:9362592

[Library search](#)

*Malmquist, Jörgen*

**Engelsk-svensk biomedicinsk ordbok : med svensk-engelsk ordlista**

Lund : Studentlitteratur, 2006 - 244 s.

ISBN:91-44-04233-7 LIBRIS-ID:10139206

URL: [Omslagsbild](#)

[Library search](#)

**Concise medical dictionary Oxford concise medical dictionary**

*Martin, E. A.*

8. ed. : Oxford : Oxford University Press, 2010. - 832 s.

ISBN:978-0-19-955714-1 (pbk.) LIBRIS-ID:11831006

[Library search](#)