



**Karolinska  
Institutet**

Course syllabus for

## **Basic Laboratory Science, 6 credits**

Grundläggande laboratoriemetodik, 6 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:

Spring2008 , Spring2013

Course code	1BA000
Course name	Basic Laboratory Science
Credits	6 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Biomedical Laboratory Science
Level	G1 - First cycle 1
Grading scale	Fail (U), pass (G) or pass with distinction (VG)
Department	Department of Laboratory Medicine
Decided by	Programnämnden för Biomedicinska analytikerprogrammet, inriktning laboratoriemedicin
Decision date	2007-10-15
Revised by	Programnämnden för Biomedicinska analytikerprogrammet, inriktning laboratoriemedicin
Last revision	2007-12-19
Course syllabus valid from	Spring 2008

## **Objectives**

The aim of the course is to provide basic theoretical and practical knowledge within laboratory methodology. On completion of the course, the student should be able to: · carry out a laboratory work carefully and systematically on the basis of given method descriptions and security regulations · understand and carry out stoichiometric calculations · master the use of basic laboratory equipment · review, analyse and document results · account for the laboratory sessions included in the course, in the form of laboratory reports

## **Content**

The students should learn to work based on given method descriptions and security regulations. Solution preparations are included in order to illustrate the characteristics of different solutions. Central and dispersion measures, and normal distribution in statistics are important parts in the course. Analyses and studies are carried out, representative of different specialisations in biomedical laboratory science, in order for the student to get a good understanding of safe analysis results. The student should carry out

and document different analyses and studies within a diagnostic laboratory practice. The following parts are included: Laboratory sessions and laboratory reports 2 HE credits Practical examination 4 HE credits

## Teaching methods

The teaching is given as lectures, laboratory sessions and seminars. The student should document laboratory parts in a personal workbook.

## Examination

The examination is carried out as a practical test and is the part of the course that underlies the final grade. All laboratory sessions and seminars including the laboratory lectures in the course are compulsory. Laboratory reports are written according to instructions for each laboratory session and must be approved. 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. If the student has failed six examinations/tests, no additional examination or new admission in the course is given. The number of times that the student has participated in one and the same examination is regarded as an examination session. Submission of a blank examination is regarded as an examination. An examination for which the student registered but not participated in, will not be regarded as an examination. In case of absence from the compulsory parts in the course (laboratory sessions and seminars and the laboratory lectures), an agreement is made between students and the responsible teacher concerning compensation.

## Literature and other teaching aids

*Burnett, David; Crocker, John*

### **The science of laboratory diagnosis**

2. ed. : Chichester : Wiley, 2005 - 542 p.

ISBN:0-470-85912-1 (hbk.) LIBRIS-ID:9612133

[Library search](#)

*Ejlertsson, Göran*

### **Statistik för hälsovetenskaper**

Lund : Studentlitteratur, 2003 - 275 s.

ISBN:91-44-03123-8 LIBRIS-ID:8353333

[Library search](#)

*Ringsrud, Karen Munson; Linné, Jean Jorgenson*

### **Linné & Ringsrud's Clinical laboratory science : the basics and routine techniques**

*Turgeon, Mary L.*

5. ed. /b [editor] Mary L. Turgeon : St. Louis, Mo. : Mosby Elsevier, cop. 2007 - xiv, 608 s.

ISBN:0-323-03412-8 LIBRIS-ID:10255799

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