Faculty of Science

BIOR61, Biology: Molecular Genetics, 15 credits

Biologi: Molekylärgenetik, 15 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2009-06-04 to be valid from 2009-06-04, autumn semester 2009.

General Information

The course is an elective course for second-cycle studies for a Bachelor of Science or Master's degree in molecular biology.

Language of instruction: English and Swedish
When necessary, the course is given in Swedish.

Main field of studies	*Depth of study relative to the degree requirements*
Molecular Biology	A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

The aim of the course is that students on completion of the course should:

- master and be able to account for basic molecular genetic concepts
- be able to present scientific results and theories orally in a scientific way
- master and be able independently to use molecular biological methods and have an understanding of the underlying theory
- master and be able to apply a scientific working method at experimental work

Course content

The genetic material and its organisation and regulation. Changes, repair mechanisms and recombination of the genetic material. Extrachromosomal DNA. Population genetics. Basic molecular genetic methods. Applications of completed theory and methods in research and development.

Course design

Teaching is given in the form of lectures, laboratory sessions, group discussions and group assignments. Participation in all part except lectures are compulsory.

Assessment

Examination takes place in writing in the form of an examination at the end of the course and through assessing written reports and assignments. For students who do not pass the regular examination an additional examination is offered in close connection to this.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass, Pass with distinction.
To pass the entire course, approved written examination, passed written assignments and laboratory reports, passed group assignments and participation in all compulsory parts are required.

The final grade are decided through a joining of the results of the parts that are included in the examination.

Entry requirements

For admission to the course is required English B and knowledge equivalent to MOBA01 Cell Biology 15 credits, BIOA01 Genetics and Microbiology 15 credits and MOBA02 The Chemistry of the Cell 15 credits, MOBA03 Molecular Biology 15 credits and 30 credits chemistry.

Further information

Subcourses in BIOR61, Biology: Molecular Genetics

Applies from V14

0911 Theory, 12,0 hp
Grading scale: Fail, Pass, Pass with distinction
0912 Laboratory Work, 3,0 hp
Grading scale: Fail, Pass

Applies from V09

0901 Molecular Genetics, 15,0 hp
Grading scale: Fail, Pass, Pass with distinction