BB2290 Molekylär biomedicin 7,5 hp

Molecular Biomedicine

När kurs inte längre ges har student möjlighet att examineras under ytterligare två läsår.

Fastställande

Kursplan för BB2290 gäller från och med HT13

Betygsskala

A, B, C, D, E, FX, F

Utbildningsnivå

Avancerad nivå

Huvudområden

Bioteknik

Särskild behörighet

At least 150 credits from grades 1, 2 and 3 of which at least 100 credits from years 1 and 2, and bachelor's work must be completed. The 150 credits should include a minimum of 20 credits within the fields of Mathematics, Numerical Analysis and Computer Sciences, 5 of these must be within the fields of Numerical Analysis and Computer Sciences, 20 credits of Chemistry, possibly including courses in Chemical Measuring Techniques and 20 credits of Biotechnology or Molecular Biology

Undervisningsspråk

Undervisningsspråk anges i kurstillfällesinformationen i kurs- och programkatalogen.

Lärandemål

The aim of the course is to provide the students an overview of the use of molecular technologies in medicine. Invited lectures will present recent scientific achievements in infectious and complex diseases including cancer.

After completed course the students will be able to

• describe current technological trends in medical applications

• discuss research trends in different diseases

• suggest suitable technological approach for a molecular investigation of a disease

• participate in an scientific discussion relating to biomedicine

• critically evaluate the results from scientific publications

Kursinnehåll

The course is focused on the use of molecular technologies in biomedical research. The lectures will cover different areas of biomedicine and will include an introduction to the particular field and the current use of modern methods for analysis and detection of respective biomolecules. The lectures will be held by experts in their specific field.

The course may include a project assignment in a selected biomedical field.

Kurslitteratur

Molecular Medicine (4th edition), R.J. Trent published by Academic Press. ISBN 9780123814517

textbooks.elsevier.com/web/product_details.aspx?isbn=9780126990577

please see course homepage for more information on new editions/books in conjunction with first lecture of the course.

Examination

• TEN1 - Tentamen, 7,5 hp, betygsskala: A, B, C, D, E, FX, F

Examinator beslutar, baserat på rekommendation från KTH:s handläggare av stöd till studenter med funktionsnedsättning, om eventuell anpassad examination för studenter med dokumenterad, varaktig funktionsnedsättning.

Examinator får medge annan examinationsform vid omexamination av enstaka studenter.

Parts of the course is examined in conjunction with the lectures. In order to achieve the highest grades, participation in these excercises is required.

Övriga krav för slutbetyg

Tentamen (TEN1, 7,5 hp, betygsskala A-F).

Etiskt förhållningssätt

- Vid grupparbete har alla i gruppen ansvar för gruppens arbete.
- Vid examination ska varje student ärligt redovisa hjälp som erhållits och källor som använts.
- Vid muntlig examination ska varje student kunna redogöra för hela uppgiften och hela lösningen.