



**Karolinska
Institutet**

Course syllabus for

From Science to Business - Concepts in Biotechnology, 7.5 credits

Från forskning till företagande - koncept inom bioteknologi, 7.5 hp

This course syllabus is valid from spring 2014.

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

Autumn2007 , Spring2014

Course code	2XX002
Course name	From Science to Business - Concepts in Biotechnology
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Not applicable
Level	AV - Second cycle
Grading scale	Excellent, Very good, Good, Satisfactory, Sufficient, Fail, Fail
Department	Department of Learning, Informatics, Management and Ethics
Decided by	Styrelsen för utbildning
Decision date	2007-11-12
Revised by	Education committee LIME
Last revision	2024-01-31
Course syllabus valid from	Spring 2014

Specific entry requirements

At least 120 higher education credits.

Objectives

The learning outcomes for the course can be subdivided into two broad areas; i) Biotech business including finance, strategy, law and regulations and ii) Entrepreneurship and innovation.

After the course the students will be able to:

Biotech business

- express understanding for the field of biotechnology business
- understand and demonstrate knowledge of the development and management of biotechnology businesses
- argue for advantages and disadvantages with public and private financing of early stage companies

- communicate basics in strategy and tools for science based companies (business plan, collaboration between large and small companies, corporate intelligence, role of boards, human resource management etc)
- demonstrate theoretical knowledge within the overall legal and regulatory framework for science based businesses (EU and US corporate law, patenting law, regulatory authorities)
- integrate knowledge of key skill-sets for early-stage entrepreneurship and handle complexity within areas such as market and IP analysis, target product profile, business plan and budgeting.

Entrepreneurship and innovation

- understand and demonstrate how discoveries and inventions are commercialized
- analyse, clearly communicate and discuss the context of entrepreneurship with both a specialist and non-specialist audience
- analyse and clearly communicate and discuss the context of entrepreneurship to both a specialist and non-specialist audience
- apply their understanding and knowledge of the basics of innovation and entrepreneurship in a broader context and relate to their own field of study
- use their new skills and continue to independently learn more about the area of innovation and entrepreneurship
- demonstrate understanding in the theory of clusters of innovation
- express knowledge for the universities role in the innovation system

Content

The course deals with the development and management of biotechnology businesses, with a focus on commercialising discoveries and inventions. The course consists of seminars based on practice and theory of the different stages of business development as well as a group-project presented in writing and orally.

In the seminars students meet practitioners and researchers with a Swedish and international background. The practitioners present specific experiences from starting and running knowledge intensive young businesses or from the financial, legal, political or corporate strategy fields. The broad picture is given by researchers in sociology or business administration with an insight in academic discoveries, start-up companies, venture capital, business expansion and selling of companies.

In the group project and case studies students from different schools will work together on topic of their choice from one of the main areas of the course.

The course is divided into four components:

- Innovation and entrepreneurship
- Law and regulations
- Finance
- Strategy

Teaching methods

The course will be based on student activating lectures.

Examination

Group thesis, case assignment and oral presentations.

Transitional provisions

The course has been cancelled and was offered for the last time in the spring semester of 2018. Examination will be provided until the spring semester of 2026 for students who have not completed the course.

Other directives

The course language is English.

The course is offered within the framework of the Stockholm School of Entrepreneurship (SSES).

Responsible institution is Karolinska Institutet (KI).

Literature and other teaching aids