



**Karolinska
Institutet**

Course syllabus for

From Science to Business - Concepts in Biotechnology, 9 credits

Från forskning till företagande - koncept inom bioteknologi, 9 hp

This course syllabus is valid from spring 2012.

Course code	4BI083
Course name	From Science to Business - Concepts in Biotechnology
Credits	9 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Bioentrepreneurship
Level	AV - Second cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Learning, Informatics, Management and Ethics
Decided by	Programnämnd 7
Decision date	2011-11-25
Course syllabus valid from	Spring 2012

Specific entry requirements

Bachelors degree or professional qualification worth at least 180 credits in biomedicine, biotechnology, cellular and molecular biology or medicine.

Objectives

The course is comprised of two parts; i) Biotech business including finance, strategy, law and regulations and ii) Entrepreneurship and innovation. On completion of the course the student should be able to: Biotech business - demonstrate a general 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 companies, role of boards etc), - demonstrate theoretical knowledge within the overall legal and regulatory framework for science based businesses (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 intellectual property, business plan and budgeting. Entrepreneurship and innovation - understand and demonstrate how discoveries and inventions are commercialised, - 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, - express knowledge for the role of universities in the innovation system.

Content

The course deals with the development and management of biotechnology businesses, focusing 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. 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-projects students from different schools will work together interdisciplinary one of the main areas of the course: 1. Innovation and entrepreneurship 2. Law and regulations 3. Finance 4. Strategy

Teaching methods

Lectures, seminars and workshops as well as assignments on group and individual level.

Examination

A written part exam, group-thesis as well as a critical friend analysis of another group thesis, case assignment, a written home-examination and oral presentations. Passed grade on all elements are required in order to get a grade on the whole course. To get a pass with distinction on the whole course, the grade pass with distinction is required on the written home-examination, the group-thesis, the critical friend analysis and on the case assignment or the written part exam. Compulsary participation There is compulsory attendance in the seminars, case work and presentations. The course director assesses if and, in that case, how absence can be compensated. Before the student has participated in all compulsory parts or compensated absence in accordance with the course director's instructions, the student's results for respective part will not be registered in LADOK. Limited numbers of examinations or practical training sessions 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 is provided. 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 counted as an examination.

Transitional provisions

After each course occasion there will be at least six occasions for the examination within a 2-year period from the end of the course.

Other directives

The course language is English. The course is offered to both graduate and postgraduate students at the five member institutions of The Stockholm School of Entrepreneurship (SSES) Karolinska Institutet (KI), the Royal Institute of Technology (KTH), the Stockholm School of Economics (SSE), Stockholm University (SU) and the University College of Arts, Crafts and Design (Konstfack).

Literature and other teaching aids