# FCA3003 KTH-SJTU Summer School in Interdisciplinary Biomedical Research 3.0 credits

**KTH-SJTU sommarskola i interdisciplinär biomedicinsk forskning**

This is a translation of the Swedish, legally binding, course syllabus.

## Establishment

Course syllabus for FCA3003 valid from Spring 2019

## Grading scale

P, F

## Education cycle

Third cycle

## Specific prerequisites

Admitted to studies at the third-cycle level at KTH with a focus on interdisciplinary biomedicine in a broad sense. Doctoral students within the following doctoral programs take precedence: Electrical Engineering, Computer Science, Technology and Health, Medical Technology, Chemical Science and Engineering, Biotechnology, and Theoretical Chemistry and Biology.

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

- To gain understanding of prominent interdisciplinary biomedical and bioanalytical research at SJTU and KTH
- To be able to relate the scientific content of the course to one's own research project. The scientific content will cover biomedical technology, proteomics, genomics, robotics, neurology, biomedical simulations and modeling
- To understand differences and similarities in Swedish and Chinese research methodology and culture and hypothesize how this can impact collaborations
- To gain an understanding of how the future challenges of health care in Sweden and China can be solved through technological solutions

## Course contents

The course comprises two weeks of full-time studies including lectures, laboratory work, study visits, presentations, preparation of a poster, self-studies on reading material, report writing, and discussions on relevant scientific fields such as, for example, biomedical technology, proteomics, genomics, robotics, neurology, biomedical simulations and modeling, and diagnostic methods.

## Course literature

Lecture handouts and scientific articles.

## Examination

- DEL1 - Attendance, 1.5 credits, grading scale: P, F
- RAP1 - Report, 1.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Examination takes the form of active participation in seminars, laboratory work and study visits, as well as an approved written final report. Grading criteria are specified in the course PM.

## Other requirements for final grade

At least 80% active participation in seminars, laboratory work and study visits. Preparations for seminars (study material and presentation material). Approved written final report.

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.