

Institutionen för organisk kemi

Kursplan

för forskarkurs

Tillämpad Läkemedelskemi Applied Medicinal Chemistry 2.0 Högskolepoäng 2.0 ECTS credits

Kurskod: KO40011 Gäller från: VT 2021

Institution Institutionen för organisk kemi

Förkunskapskrav och andra villkor för tillträde till programmet

Admitted to a PhD program in chemistry, or a closely related subject.

Lärandemål

After completion of the course the student should:

- * be able to explain and understand the general concepts of medicinal Chemistry, early and late development
- * understand basic concepts of drug metabolism and pharmacokinetics
- * be able to understand how you alter/modify chemical structures to affect phys chem properties
- * be able to propose efficient routes to drug-like molecules, from simpler drugs to more complex bioconjugates
- * understand how conformations changes/affect binding to biological targets and can be utilized in synthesis
- * be familiar with process as well as flow chemistry best practice in pharma

Innehåll

This course in medicinal chemistry emphasize on the most important concepts within the field of medicinal chemistry. The students will gain a deeper understanding of concepts in medicinal chemistry and how modern synthetic methodology can be applied to produce candidate drugs in various therapy areas. In addition, we will offer a process chemistry part including new technologies such as flow chemistry. Emphasis will be on real examples, case studies will be presented in each section

Obligatoriska moment

Participation in lectures and seminars is compulsory. In the event of special circumstances, the examiner may, after consultation with the teacher concerned, grant a student exemption from the obligation to participate in certain compulsory instruction.

Examinationsformer

The course is examined as follows: Knowledge assessment takes the form of a written exam, and participation in seminars.

The course and examination language is English.

Grading (passed or failed) is related to the intended learning outcomes.

Grading criteria are handed out at the start of the course.

Students who receive a failing grade on a regular examination are allowed to retake the examination as long

as the course is still given. Other mandatory course elements are equated with examinations. The course has at least two examination occasions per year when the course is given.

Arbetsform

Instruction (in English) consists of lectures and seminars.

PhD students can take this course as a part of the fulfillment to a PhD degree if a similar course has not been completed in their previous studies.