

# FAH3904 Introduction to Asphalt Chemistry 4.0 credits

#### Introduktion till asfaltskemin

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

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

### **Establishment**

Course syllabus for FAH3904 valid from Spring 2019

## **Grading scale**

P, F

## **Education cycle**

Third cycle

# Specific prerequisites

Registered for PhD-studies.

## Language of instruction

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

## Intended learning outcomes

Upon completion of this course, the doctoral student shall be familiar with basic chemistry of asphalt.

#### Course contents

- 1. Origin of Crude Oil (Petroleum) Ages and Variations in Formation
- 2. General Chemistry
- 3. Organic Chemistry
- 4. Physical Properties
- 5. Structures of Multi-Molecular Mixtures: Non-Homogeneous Systems at the Molecular Level
- 6. Analytical Chemistry Including Methods of Determining Macromolecular and Agglomerated Species
- 7. Some Typical Analytical Values for Asphalts

#### Course literature

**Course Compendium** 

#### **Examination**

- RAP1 Report, 2.0 credits, grading scale: P, F
- ÖVN1 Exercises, 2.0 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.

# **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.