



DEPARTMENT OF CONSERVATION

KKV707 Advanced analytical methods for conservation, 7.5 credits

Avancerade analysmetoder inom konservering, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Programme Council for Conservation Studies on 2022-12-14 and was last revised on 2023-10-24 by Department of Conservation to be valid from 2024-01-15, spring semester of 2024.

Field of education: Design 50% and Fine Arts 50%

Department: Department of Conservation

Position in the educational system

The course can be part of the following programmes: 1) Conservation with Specialisation in Conservation of Cultural Heritage Objects, Master's Program (N2KVP) and 2) Master of Science in Conservation (N2KUV)

Main field of studies

Conservation with Specialization in Conservation of Cultural Heritage Objects

Conservation

Specialization

A1N, Second cycle, has only first-cycle course/s as entry requirements

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Entry requirements

Bachelor in Conservation with Specialization in Conservation of Heritage Objects (180 credits) or equivalent is required for entry. Students with other academic background relevant to the subject area of conservation, corresponding to at least a Bachelor Degree, can after consideration be given access to the course. English 6 / English B from Swedish Upper Secondary School or the equivalent level of an internationally recognized test, for example TOEFL, IELTS, is a requirement.

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

- demonstrate knowledge on methods of analysis addressing different questions in conservation
- understand the types of data that can be acquired through analytical work and their relative advantages and limitations

Competence and skills

- develop analytical laboratory skills and understand good laboratory practice for analysis
- carry out a small-scale analytical project with selected techniques and discuss the advantages and limitations or alternatives
- prepare samples for analysis choosing the most appropriate methods
- explain and communicate the results of analysis both in written form and orally

Judgement and approach

- make informed decisions on sampling in order to address specific research questions, balancing sustainability issues, limitations on sampling, cultural material and costs
- make decisions on the type of analysis to use taking into consideration the object, its constituent material/s, its values and the context
- demonstrate the relationship between scientific knowledge and conservation and how scientific data analysis can inform conservation decisions
- identify, and critically discuss ambiguities and ethical issues in relation to sampling and use of destructive methods of analysis

The course is sustainability-related, which means that at least one of the learning outcomes clearly shows that the course content meets at least one of the University of Gothenburg's confirmed sustainability criteria.

Course content

The course aims to give the student knowledge of various scientific methods of analysis for applications in conservation of cultural heritage objects and environments. The course also provides tools for critically evaluating how these tools and methods are used in various current projects and how they inform our decisions in heritage conservation. With a focus on materials science for conservation, the course an introduction to a number of methods which are widely used in contemporary conservation. Time is given

for the student to study one or more of these methods in cases where supervision is available.

Based on case studies, individual and group work, the student shall collect data for an individual project.

Form of teaching

The course consists of field studies, workshops, lectures, practical sessions and seminars. Participation in the laboratory sessions is mandatory.

Based on case studies, individual and group work, the student shall collect data for an individual project.

Language of instruction: English

All lectures will be held in English. Individual instructions may be given in English.

Assessment

Examination 1: Seminars/Workshops (2.5 credits)

Examination 2: Written assignment (5 credits)

If there are special reasons, the examiner may allow a different form of examination than what is stated above. In order to Pass the course, or one of the Examinations, supplementary assignments can be offered after assessment and decision by the examiner.

If a student, who has failed the same examined component twice, wishes to change examiner before the next examination, a written application shall be sent to the department responsible for the course and shall be granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

In cases where a course has been discontinued or has undergone major changes, the student shall normally be guaranteed at least three examination occasions (including the ordinary examination) during a period of at least one year from the last time the course was given.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

Examination 1 is graded with Pass (G) or Fail (U).

Examination 2 is graded with Pass with Distinction (VG), Pass (G) and Fail (U).

For the grade Pass with Distinction (VG) on the whole course, the student needs to achieve the grade VG on Examination 2 and Pass (G) on examination 1.

Course evaluation

The evaluation is performed individually through a form at the learning platform and collectively by a scheduled discussion. The result of the course evaluation and any changes in course structure are archived, and will be available at the Department within a reasonable time frame after the course completion and should be handed on to future students the next time the course is offered.

Additional information

This course is replacing the course KKV705 Material science for conservation 7,5 hec, and can not be used in the same degree.

All software applications used are available for students in the computer studios or downloadable as freeware or time-limited trials. A personal laptop and camera will facilitate the course and continual individual learning. To be able to follow and pass the course the students will need a base level of generic computer skills.

The fieldwork may be located in locations that require overnight stays.

Costs: Expenses may occur in connection with the course, for example during fieldwork, these are paid for by the student.

Environment and sustainable development: The Gothenburg University's environmental management system is certified according to ISO 14001 and EMAS.

Quality assurance: Follow-up and evaluation of the program takes place in accordance with the applicable policy for quality assurance and quality development of education at the University of Gothenburg.