



# SK1140 Photography for Media

## 4.0 credits

**Fotografi för medieteknik**

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

### **Establishment**

The course plan applies from and including VT 2024 according to the school head's decision: S-2023-0372. Decision date: 2023-03-14

### **Grading scale**

A, B, C, D, E, FX, F

### **Education cycle**

First cycle

### **Main field of study**

Technology

### **Specific prerequisites**

Active participation in SK1120 Theory of wave motion or equivalent course.

### **Language of instruction**

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

# Intended learning outcomes

After completing the course, the student should be able to:

- practical use of digital cameras to solve photographic tasks. This includes choosing suitable lenses and settings to obtain the desired perspective, depth of field and exposure.
- basic photometric concepts, as well as being able to make photometric calculations that are relevant for practical photography.
- assess and quantify the image quality of photographic systems in terms of sharpness and noise.
- the basics of color theory, be familiar with the concept of color temperature (white balance), and be able to use this knowledge in practical photography.
- assess how high pixel density is needed in digital photography to avoid image distortion and other quality losses.

## Course contents

Optical imaging, Photographic lenses, Perspective, Photometry, Camera components and their function, Electronic image sensors, The sampling criterion applied to digital images, Color photography, Image quality measures (resolution, MTF, noise, dynamics).

## Examination

- **TEN1** - Written Exam, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- **LAB1** - Laboratory Experiments, 1.0 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.

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

## 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.