Course: "Color and Image Appearance Models"

- **Course code:** FDS153
- **ECTS credits:** 16
- **Lecturers:** Sandra Dedijer

**Number of classes (per week):**
- Lectures: 5
- Practice: 0
- Study Research Work: 4
- Academic research: 0
- Other: 0

**Prerequisite courses**

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<thead>
<tr>
<th>Number</th>
<th>Course code</th>
<th>Course title</th>
<th>Obligatory attendance</th>
<th>Obligatory to pass</th>
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1. **Educational objectives:**

The objective is to introduce students to the bases in generating visual stimuli and mechanisms and effects during the visual perception of coloured complex surfaces.

2. **Educational outcomes (acquired knowledge):**

Ability to deal with scientific and research work.

3. **Course content/structure:**

The objective is to introduce students to the bases in generating visual stimuli and mechanisms and effects during the visual perception of coloured complex surfaces. Course content will cover theoretical knowledge on the complex visual sensation of colours and spatially variable images and objects. During the course, students are introduced to the manners of classification, scaling and calculating visual emotions in various observation conditions. - Fundamentals in psycho-physics and creation of visual stimuli - Observation effects (chromatic adaptation, dark and light adaptation, effect of additional image, colour constancy) - Scaling sensitive sizes of visual stimuli - Determining minimally observable differences - Colour appearance models CIECAM97 and CIECAM02 - Defining image quality - Image appearance models iCAM

4. **Teaching methods:**

Lectures. Consultations. Lectures are organized in combined form. The presentation of the theoretical part is followed by the corresponding examples. In addition to lectures there are regular consultations. Part of the course content can be passed in segments (making a logical unity) during lectures, and by writing a seminar paper (presented orally).

**Knowledge evaluation (maximum number of points 100):**

<table>
<thead>
<tr>
<th>Pre-exam assignments</th>
<th>Compulsory</th>
<th>Points</th>
<th>Final examination</th>
<th>Compulsory</th>
<th>Points</th>
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<tbody>
<tr>
<td>Oral examination</td>
<td>YES</td>
<td>50</td>
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<tr>
<td>Written examination</td>
<td>YES</td>
<td>50</td>
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**Literature**

Relevant literature in English