## Course Unit Descriptor

**Study Programme:** Fine Arts (module: Photography)

**Course Unit Title:** Optics 1

**Course Unit Code: OPT1** 

Name of Lecturer(s): Cvetinov Miroslav

Type and Level of Studies: Undergraduate academic studies

Course Status (compulsory/elective): Compulsory

Semester (winter/summer): Winter

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

**Number of ECTS Allocated: 2** 

Prerequisites: None

**Course Aims:** Introduction to the concepts of light and principles of geometrical optics.

**Learning Outcomes:** Students are capable of understanding the general principles of geometrical optics and light representations, and will be able to follow other courses in the curriculum.

## **Syllabus:**

Theory

Theoretical foundation of light (electromagnetic waves and interaction with matter, geometrical optics, polarization, lenses, image formation).

Practice

Students are instructed in how to measure focal length of lenses, combine different lenses, use polarisers and select parameters to achieve optimal image.

Required Reading: Hedgecoe: The Book of Photography, DKL-LONDON 1976; Mono and Manjana: Complete

Photography Manual, Harper Collins Publishers 2007; Сирс: Оптика

Weekly Contact Hours: 2 Lectures: 2 Practical work: 0

## **Teaching Methods:**

Group lectures with the use of supplementary teaching and video material.

## **Knowledge Assessment (maximum of 100 points):**100

Pre-exam obligations	points	Final exam	points
Active class	10	written exam	40
participation	10	written exam	40
Practical work	20	oral exam	30
Preliminary exam(s)			
Seminar(s)			

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.