Laboratory in Information Science 2

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1. Course Description

This course introduces the foundations of image processing and computer graphics to students taking this course. This course deals with the filter processing, image filters, basic shading programming, basic usage of digital paint / photo editing software and drawing software. This course is related to diploma policy 2 and 3.

2. Course Objectives

By the end of the course, students should be able to do the following:
- write image-processing programs.
- write 3DCG shading programs.
- operate basic functions of digital painting / photo editing software.
- operate basic functions of drawing software.

3. Grading Policy

Grading will be decided based on repots (20%) and term-end examination (80%).
Feedbacks on reports and examinations will be given on LMS.

4. Textbook and Reference

Textbook
The Learning materials are published on the LMS.

5. Requirements(Assignments)

The students are expected to review contents and short tests before starting new topics. It takes approximately one hour to finish this work.

6. Note

7. Schedule

[1]	(MMM1) Time series filters (1) digital filters for time series data
[2]	(MMM1) Time series filters (2) MMM1 exercise programming report writing
[3]	(MMM2) Image filters (1) making digital image filters
[4]	(MMM2) Image filters (2) MMM2 exercise programming and report writing
[5]	(MMM3) Basic 3DCG programming (1) Shading process for sphere shape
[6]	(MMM3) Basic 3DCG programming (2) MMM3 exercise programming and report writing
[7]	(MMM4) Basic usage of digital painting / photo editing software (1) basic usage of GIMP
[8]	(MMM4) Basic usage of digital painting / photo editing software (2) MMM4 exercise and report writing
[9]	(MMM5) Image processing by digital painting / photo editing software (1) image processing using GIMP
[10]	(MMM5) Image processing by digital painting / photo editing software (2) MMM5 exercise and report writing
[11]	(MMM6) Basic usage of drawing software (1) basic usage of Inkscape
[12]	(MMM6) Basic usage of drawing software (2) MMM6 exercise and report writing
[13]	(MMM7) Image making by drawing software (1) image making using Inkscape
[14]	(MMM7) Image making by drawing software (2) MMM7 exercise and report writing
[15]	Summary and shot tests