# General Information:

Name of Course: Foundations of Informatics 2.

Course Code: IVB184ANMI

Semester: 2nd

Number of Credits: 3

Allotment of Hours per Week: 2 Lecture and 2 Practical Lessons /Week

Evaluation: Mid-semester grade

Prerequisites: Foundations of Informatics 1.

Responsible lecturer: Ildikó HORVÁTH Dr.

Instructors: Réka SÁRKÖZI Dr., assistant professor

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## General Subject Description

The aim of this course is to provide students basic knowledge about visual communication, manual and digital technical drawing, 3D modelling and representation, digital processing of manual drawings and improve their spatial visualization.

## Learning Outcomes

During the course multiple softwares will be introduced, like Gimp, InkScape, SketchUp, Archicad, Rhino 3D, Grasshopper. At the end of the course students will be able to determine the necessary tools for their projects in the introduced fields and use them on a basic level.

## Subject content

Students are required to complete homeworks and a midterm tasks.

## Examination and evaluation system

*In all cases.* *Annex 5 of the Statutes of the University of Pécs, the* ***Code of Studies and Examinations (CSE) of the University of Pécs*** *shall prevail. https://english.mik.pte.hu/codes-and-regulations*

**Requirements in study period:**

The participation on the online classes is obligatory. The classes will be held at the Foundations of Informatics 2. TEAMS group and the main field of communication is Microsoft TEAMS.

**Necessary tools for the practical lessons:**

PC with internet connection

**The exercises and scores of the semester:**

Homework: max. 10\*5=50

Midterm task: max. 50 min. 25

 max. 100 min. 50

**homework:**

deadline for maximum 5 points: next practical lesson

replacement for maximum 4 points: 2 weeks after deadline

**midterm task**

deadline for maximum 50 points: 26th of April

replacement for maximum 40 points: 10th of May

**Digital submission on Mcrosoft Teams**

Grading Scale for the offered grade:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Numeric Grade: | 5 | 4 | 3 | 2 | 1 |
|  | A, excellent | B, good | C, avarage | D, satisfactory | F, Fail |
| Evaluation in points: | 85%-100% | 71%-84% | 60%-70% | 50%-59% | 0-49% |

**Requirements in exam period:**

## Readings and Reference Materials

Julia McMorrough – Drawing for Architects

Francis D. K. Ching, Architecture – Form, Space and Order

Arturo Tedeschi – AAD Algorithms-Aided Design: Parametric Strategies using Grasshopper

## Methodology

The course uses a primarily practical based education method. The students have to solve tasks on the practice and on their own.

## Schedule

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| --- |
| **Scedule of the semester** |
| **week** | **LECTURE** | **PRACTICE** |
| 1. | Introduction |
| 2. | Tools of manual technical drawing | Technical writing |
| 3. | Projection systems | Drawing main views from axonometry |
| 4. | Reconstruction | Drawing axonometry from main views |
| 5. | Digitalization of manual drawings | Digitalization of previous drawings |
| 6. | Raster and vector graphic editors | Post processing previous drawings in raster graphic editor |
| 7. | Basics of visual communication, introduction of the midterm task | Drawing illustration in vector graphic editor |
| 8. | Types of 3D modelling software | 3D modelling |
| 9. | Basics of product design and optimization, parametric modelling | 3D modelling |
| 10. | SPRING BREAK |
| 11. | CAD software | Digital technical drawing |  |
| 12. | Basics of visualization | Visualization and post processing |
| 13. | Consultation about midterm task, independent work |  |
| 14. | Consultation about midterm task, independent work |
| 15. | Midterm task submission |

The course will be held online until the school changes the education method of the semester.

We reserve the right to make changes to the details of this course syllabus (date / location / clarifications), which will be communicated to the students. In case of questions and problems that arise during the semester contact the responsible lecturer or the study program coordinator.

Réka SÁRKÖZI

responsible lecturer

Pécs, 29th of January, 2021