# General Information:

Name of Course: FOUNDATIONS OF

 INFORMATICS 2

Course Code: IVB185ANVM

Semester: 2th

Number of Credits: 3

Allotment of Hours per Week: 2 Laboratory Lessons / Week

Evaluation: Signature (with grade)

Prerequisites: Completed Foundations of Informatics 1

Responsible lecturer: Ildikó horváth dr., adjunct

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## General Subject Description

The Foundations of Informatics 2 Course is mainly laboratory work helped with presentations live by the lecturer using the AutoCAD program. The application of this generally usable technical program provide an example about the CAD programs. It helps to study their structure and to learn their practical use.

## Learning Outcomes

The course will focus on:

- Exploring the possibilities of the applied CAD program

- Learning the base knowledge in field of the descriptive geometry and technical drawing
 needed to the solution of the practical tasks

- Learning the organisation and structure of the program

- Learning the practical application of tools and commands of the program

- Lay out and organisation of the used tools in order to the solution of a given task

- Carrying out the task within a specified time.

## Subject content

Students are required to complete the technical drawing of small parts of different technical tools. It is carried out in 2D in multi view orthographic projections and in so called 3D drawings in orthogonal axonometric projection based on printed figures showing the objects in the opposite projections. The drawings are completed with dimensioning and annotation. Different parts of the drawings can have different scaling. The preparation of plotted and printed drawings can be carried out in the so called model or paper spaces. The control of the result happens by printing into pdf files.

## 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*

Attending of all classes is required. Unexcused absences will adversely affect the grade, and in case of absence from more than 30% of the total number of lesson will be ground for failing the class. To be in class at the beginning time and stay until the scheduled end of the lesson is required, tardiness of more than 20 minutes will be counted as an absence. In the case of an illness or family emergency, the student must present a valid excuse, such as a doctor's note.

Students are required to complete two midterm tests according to the given schedule. The content of the test is based on the knowledge studied until the time of the actual test. Both tests can be repeated one times during the semester according to the schedule. In case of a certified obstacle the retake of the tests is possible in the first week of the exam period if the attendance of the classes during the semester reached the prescribed grade.

The final grade will be the average of the two midterm tests. Both tests have to reach the grade 2 at least to have the signature for a completed semester.

Grading Scale:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Numeric Grade: | 5 | 4 | 3 | 2 | 1 |
|  | A, excellent | B, good | C, avarage | D, satisfactory | F, Fail |

## Readings and Reference Materials

**Required:**

* + Built in and [online](http://joom.ag/mLhb) help of the AutoCAD program

**More:**

* + Learning material of descriptive geometry sent in e-mail
	+ Examples and tasks related to the actual knowledge and work, printed or sent in e-mail

## Methodology

After the presentations using the AutoCAD program, the students solve practical tasks helped by the lecturer. They can complete the task at home based on the printed task sheets. Students can download the student version of the program and they are allowed to go in the laboratories in free times that can be checked in the timetable. Supplementary learning materials of descriptive geometry can be reached in e-mail.

## Students with Special Needs

Students with a disability and needs to request special accommodations, please, notify the Deans Office. Proper documentation of disability will be required. All attempts to provide an equal learning environment for all will be made.

## Schedule

|  |  |
| --- | --- |
| Week | Topic of Exercise |
| 1 | Introduction of the used program, work space, menu system, settingsInitial settings, application of fundamental commands editing a drawing |
| 2 | Command groups, structure of commands, general steps of their application, command variablesSelection, erase, zoom in a prepared drawing, completion with new elements |
| 3 | Different coordinate systems, settings and related program variablesConstruction and modification of 2D and 3D objects using the coordinate systems |
| 4 | Layer system, object properties defined with layer settingsConstruction of a complex drawing with elements on different layers |
| 5 | Modification and copy of object properties Selection of objects and change their properties, based on a prepared drawing |
| 6 | Overview of the drawing commandsConstruction of a complex drawing based on a printed pattern |
| 7 | Overview of the modification commandsApplication of the modification commands during the construction of a drawing |
| 8 | Test 1& Groups, blocks and attributes |
| 9 | Repair (and replacement) of the 1st test& Hatch and patterns |
| 10 | Spring Break |
| 11 | Text, annotations, measurement, scaling and dimensioningAnnotation and dimensioning of a prepared drawing |
| 12 | Holiday |
| 13 | Scaling and printing of drawings, application of view ports in model and paper spacePreparing of a drawing for documentation |
| 14 | Test 2& Exported and imported drawings and elements, applied file types |
| 15 | Repair (and replacement) of the 2nd test& Closing and evaluation 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.

László Vörös dr.

lecturer

Pécs, 04.02.2019