# General Information:

Name of Course: Parametric modelling

Course Code: SZE063AN

Semester: 2nd

Number of Credits: 2

Allotment of Hours per Week: 0 Lecture and 2 Practical Lessons /Week

Evaluation: Mid-semester grade

Prerequisites: Descriptive Geometry1.

Responsible lecturer: Réka SÁRKÖZI, assistant lecturer

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## General Subject Description

On this course the students learn the theoretical basics of parametric design, parametric design thinking, and acquire how to use a parametric design software.

## Learning Outcomes

Students will be able to use the Rhinoceros 3D software and its add-on Grasshopper. They are able to create basic parametric models.

## Subject content

In the first half of the semester students learn how to use the necessary softwares. In the second half they create they own parametric model as midterm task.

## 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 classes is obligatory. The maximum amount of the missed classes is 3 per semester due to the Study and Examination Regulations.

**1.** Exam 40 p

**2.** Midterm task 60 p

**Maximum** **100p**

85 p – 100 p 100% A (5, jeles,excellent,sehr gut)

71 p – 84 p 84% B (4, jó, good, gut)

60 p – 70 p 70% C (3, közepes, avarage, befriedigend)

50 p – 59 p 59% D (2, elégséges, satisfactory, genügend)

0 p – 49 p 49% F (1, elégtelen, fail, ungenügend)

1. Exam

Date: week 8

Retake: week 10

Scores: max. 40p, min. 20p

2. Midterm task

Submission deadline: week 14

Retake: week 15

Scores: max. 60p, min. 30p

## Readings and Reference Materials

Arturo Tadeshi, AAD\_Algorithms-Aided Design

Wassim Jabi, Parametric Design for Architecture

## Methodology

1. theoretical and practical lessons

2. work at home

4. consultation

## Schedule

|  |  |
| --- | --- |
| Hét | Labor, Kedd 13:15-14:45 |
| 1. | Introduction |
| 2. | Basics of parametric design.  |
| 3. | Surfaces, Breps. Slicing |
| 4. | Curves, Surfaces. Voronoi. |
| 5. | Data management. Attractor. |
| 6. | Mathematical formulas. Tower. |
| 7. | Meshes. Truss grid. |
| 8. | Exam |
| 9. | Consultation |
| 10. | Consultation |
| 11. | Spring break |
| 12. | Consultation |
| 13. | Consultation |
| 14. | Submission |
| 15. | Retake |

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, 2020