

COURSE SYLLABUS SEMESTER

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| Name of Course | Computer Aided Structural Design 3. (Nemetschek) |
| Course Code | MSB376ANEP |
| Allotment of Hours per Week lec/prac/lab | 0/0/2 |
| Number of Credits | 2 |
| Program | Civil Engineering (Bsc) |
| Evaluation | Mid-semester grade |
| Semester | 6 |
| Prerequisites | - |
| Department | Civil Engineering department |
| Instructor | Dávid Mansoor Sadrinia |

INTRODUCTION, GENERAL COURSE DESCRIPTION

The aim of the course is to provide students with a basic understanding of Allplan's structural design software.

LEARNING OBJECTIVES

Methodology:

With the help of Allplan the student can acquire the skills to make 2D, 3D models and structural drawings mainly for reinforced concrete building. In addition, students will also learn the basic methods of reinforcement for beams, columns, slabs and walls. During the course there will be a written examination based on theoretical questions and an assignment that covers the semesters material.

Schedule:

1. General course description
2. Introduction of Allplans interface and the Allmenu
3. Introduction of general modules (Construction, Extended construction)
4. Introduction of general modules (Texts, Measurements)
5. Introduction of additional modules (Modelling 3D)
6. Introduction of architect modules (Walls, openings, building elements)
7. Introduction of engineering modules (Associative views)
8. Introduction of engineering modules (Reinforcement, beams)
9. Introduction of engineering modules (Reinforcement, columns)
- 10. Written examination, Assignments review**
- 11. SPRING BREAK**
12. Introduction of engineering modules (Reinforcement, slabs)
13. Introduction of engineering modules (Reinforcement, walls)
14. Creation of layout plans and design documentations
- 15. Opportunity for retake examination, Assignment deadline**

ATTENDANCE AND GRADING

Attendance:

Attending is required all classes, and will impact the grade (max. 10%). Unexcused absences will adversely affect the grade, and in case of absence from more than 30% of the total number of lesson will be grounds 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.

Grading: The weighted average of the written examination and assignment.

Offered exam grade:

| Evaluation in percent's | Numeric grade |
|-------------------------|---------------|
| 89%-100% | 5 |
| 77%-88% | 4 |

| | |
|---------|---|
| 66%-76% | 3 |
| 55%-65% | 2 |
| 0-54% | 1 |

READINGS AND REFERENCE MATERIALS

1. Recorded webinars: <https://www.allplan.com/en/recorded-webinars/all-recorded-webinars/>
2. Tutorials: <https://www.allplan.com/en/cad-tutorials/allplan-2017-tutorials/>
3. Building Information Modeling: <https://www.allplan.com/en/bim/bim-and-allplan/>

SCHEDULE

| | | EDUCATION PERIOD | | | | | | | | | | | | | | | EXAM PERIOD | | | | | | |
|--|-----------------|------------------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-------------|----|----|----|----|--|--|
| 2019/2020. 2. SEMESTER | | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. | 13. | 14. | 15. | 1. | 2. | 3. | 4. | 5. | | |
| Lecture number | | | | | | | | | | | | | | | | | | | | | | | |
| Practice/Labor number | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | 11 | 12 | 13 | 14 | | | | | | | |
| Written examination | | | | | | | | | | | X | | | | | | | | | | | | |
| Assignment | review | | | | | | | | | | X | | | | | | | | | | | | |
| | deadline | | | | | | | | | | | | | | | X | | | | | | | |
| Signature / Mid-semester grade specifying | | | | | | | | | | | | | | | | | s/ MG | | | | | | |