CONSTRUCTION STUDIES II.

2023/24. 2. SEMESTER

| MAIN INFORMATION | | | | | |
|--|---|---------------------------------------|---|------------------|--|
| COURSE NAME | Konstrukciós Ismeretek 2 | | Construction Studies II. | | |
| COURSE CODE(S) | YAXCS2FMNF | | | | |
| DEPARTMENT | Óbuda University Ybl Miklós Faculty of Architecture, Institute of Architecture | | | | |
| PROGRAMME, TRAINING | Architect Msc | | full time | | |
| COURSE INSTRUCTOR (Instructor managing the course) | Dr. Gergely Norbert VIZI PhD, Assistant Professor | vizi.gergely.norbert@uni- obuda.hu | consulting hours: TUE 14:25-15:10, WED 10:45-11:30, by prior arrangement in e-mail, in the institute office | | |
| INSTRUCTORS, LECTURERS | | | | | |
| PRE-REQUIREMENT | Construction Studies I. | | | | |
| HOURS OF LECTURES (WEEKLY) | 1 hours (1x 45') | | HOURS OF CLASSROOM PRACTICE/ LAB EXERCISE (WEEKLY) | 1 hours (1x45') | |
| ASSIGNMENT | Midterm assignment, and test | | CREDITS | 3 credits (ECTS) | |
| BRIEF DESCRIPTION | To get to a common knowledge on basic and ecological building structures and systems in Central Europe such as substructures, waterproofing, flatroofs, terace and green roofs, curtain walls, and hall structures. To learn the requirements and applicability of this structures and To get familiar with the required form and content of an execution plan with the help of the end term plan | | | | |
| RECOMMENDED LITERATURE - (Building Construction) | Andrea Deplazes (2005) Constructing Architecture Angus J. Macdonald (2001) Structure and Architecture Széll László (2011): Magasépítéstan I-II. TERC Kft., Budapest Bársony István (2006): Magasépítéstan I. TERC Kft., Budapest Bársony István (2007): Magasépítéstan II. TERC Kft., Budapest Christian Schittich (ed.) (2008): Building Skins. BIRKHÄUSER EDITION DETAIL, Berlin Ansgar and Benedikt Schulz (2016): Perfect Scale. BIRKHÄUSER EDITION DETAIL, Berlin Christian Schittich (Ed.) (2006): Maisons individuelles. BIRKHÄUSER EDITION DETAIL, Berlin Christian Schittich (Ed.) (2010): Small Structures. BIRKHÄUSER EDITION DETAIL, Berlin Detail magazin https://www.detail-online.com/ | | | | |
| TECHNICAL EQUIPMENT REQUIRED | Rulers, pencils, A3-A2 paper. The use of mobile phones and notes are prohibited during the examinations. In case of online education: Contact: Neptun, E-learning and E-mail. Education materials: According to E-learning Lessons: E-learning, Zoom | | | | |

| SCHEDULE OF THE SEMESTER | | | | | | | |
|--------------------------|--|----------|-------------------------------|---|--|--|--|
| WEEK | LECTURE | LECTURER | FORM OF PRACTICE | PROGRAM OF PRACTICE | | | |
| 1. 13.feb. | Introduction, WATERPROOFING - substructures, soil moisture insulation | VGN | Handing out HW#1 | Handing out Homework #1 (execution plan) | | | |
| 2. 20.feb. | WATERPROOFING - groundwater, groundwater pressure | VGN | MGY1 sub structure details | | | | |
| 3. 27.feb. | FLAT ROOF DESIGN - straight and inverted layering, single and double roofs, walkable and non-walkable roofs. | VGN | MGY2 Slope design | | | | |
| 4. 05.mar. | FLAT ROOF INSULATION - Roof insulation of different materials Waterproofing - terrace roofs | VGN | | HW1 consultation | | | |
| 5. 12.mar. | FLAT ROOFS - green roofs | VGN | MGY3: roof details | | | | |
| 6. 19.mar. | INNER WATERPROOFING: • BATHROOMS AND SHOWERS | VGN | | HW1 consultation | | | |
| 7. 26.mar. | 1st. TEST | VGN | | HW1 consultation | | | |
| 02.apr | BREAK | | | | | | |
| 8. 09.apr | CURTAIN WALLS DESIGN QUESTIONS DETAILS | VGN | MGY4: curtain wall details | HW1 submission | | | |
| 9. 16.apr. | HALL STRUCTURES | VGN | Handing out HW#2 | HW1 expletive submission | | | |
| 10. 23.apr. | HALL STRUCTURES | VGN | | HW#2 Consultation | | | |
| 11 30.apr. | HALL STRUCTURES | VGN | 2nd. TEST | HW#2 Consultation | | | |
| 12 07.maj. | SUMMARY | VGN | CorTEST1 | Handing in HW#2 | | | |
| 13 14.maj. | CorTEST2 | VGN | HF2 expletive submission | Evaulation | | | |

| REQUIREMENTS FOR THE COMPLETION OF THE SEMESTER | | | | |
|--|--|--|--|--|
| MID-SEMESTER TASKS AND TESTS | | | | |
| REQUIREMENT | EQUIREMENT DESCRIPTION | | | |
| PARTICIPATION AT LESSONS | The practice lessons can be missed up to three times (see § 46 ETVSZ) You have to arrive well prepared, otherwise you won't be marked as present in the lectures and seminars | 1 | | |
| IN CASE OF ABSENCE FROM LESSONS AND EXAMINATIONS | Absence is considered to be justified with a medical certificate presented. | - | | |
| MGY1 SUB STRUCTURE DETAILS | Students draw substructure details. Formal requirements: on provided pre-printed worksheet with pencil, fineliner, ruler. Handing in: at the end of class. ade=adequate/ ina=inadequate | ade/ina | | |
| MGY2 SLOPE DESIGN for FLAT ROOF | The students prepare a top view drawing of a flat roof structure. M=1:50 Formal requirements: you must work on the worksheet downloaded and printed from e-learning. Work with pencil. Free hand drawing is advised Handing in: at the end of class | ade/ina | | |
| MGY3 FLAT ROOF DETAILS | Students make models for different cladding and draw them in section and view. Formal requirements: you must work on the worksheet downloaded and printed from e-learning. Work with pencil. Free hand drawing is advised Handing in: at the end of class | ade/ina | | |
| MGY4 CURTAIN WALL | The students draw curtain wall connection details. Formal requirements: you must work on the worksheet downloaded and printed from e-learning. Work with pencil. Free hand drawing is advised Handing in: at the end of class | ade/ina | | |
| HW1 EXECUTION PLAN | The students will make an execution plan section of a multistory building based on their previous knowledge with weekly consultation. Formal requirements: drawings on A2/A3-as paper S=1:50, 1:20, 1:10 1:5 scale, drawings can be made by hand or CAD. Handing in: as in schedule. teacher's signature required before handing in 1 pcs section M=1:50, 1:20, 1 pcs elevation M=1:50, 1:20, min. 2 pcs details | max 30 min 15 | | |
| HW2 HALL | As independent work, with weekly consultation the students prepare the plans or 3D modell of a Hall. Formal requirements: A3/A2 page M=1:100 scale, with ruler or CAD. Handing in: 1 or 2 pcs. A3/A2 page according to schedule. | max 25 min 12,5 | | |
| OPTIONAL TASK (NOT OBLIGATORY AND DOES NOT REPLACE ANY TASK OR PARTICIPATION IN ANY DUTY!) | Presentation connecting to the semester/ business trip report/ workbook presenting in the last lecture | max 6 points | | |
| TEST (TS) | The goal of the TESTs is to check the general knowledge acquired from the subject. In the test we will basically require drawings worthy of an engineer with explanatory text. You should acquire 60% in the test to pass it. | TS1 max25 min 12,5 TS2 max20 min 10 | | |
| TOTAL | | 100 pont | | |

| SEMESTER CLOSING REQUIREMENTS | | | | | | |
|---|--|----------|------------------|----------|---------------|--|
| CONDITIONS FOR OBTAINING A SIGNATURE | You have to do all of the tasks and have at least the minimum points from all of them separately. You have not skipped lectures and/or practice more than 3 times | | | | | |
| SEMESTER GRADE | 0-50 pont | 51-65 | 66-79 | 80-89 | 90-100 | |
| | 1 - FAIL | 2 - PASS | 3 - SATISFACTORY | 4 - GOOD | 5 - EXCELLENT | |
| SIGNATURE RETAKE EXAM | One out of the tests can be retaken in the signature retake exam, if the test and the corrective test was both unsuccessful. If neither the test and nor the corrective test was written (min 20% of the total points) the test can't be retaken in the signature retake exam. The signature retake exam will be from the whole material of the semester. OR One of the homework can be submitted, it the other was submitted during the semester and the points gained for those reaches the minimum requirement. In case of submitting with signature retake, the maximum point will be equal with the minimum point. SO One of the tests OR one Homework can be done with signature retake exam, not both! | | | | | |