SUBJECT DATA SHEET

Department: In	nstitute of Building Structures	
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Professional:	Architecture	
Title of the course	Design of Buidling Structures I.	
Code of the course	PM-RESNE035	
Leader of the course:	Gergely Sztranyák	
Semester:	SPRING	
Credit:	4	
Number of the lessons:	:	
Lectures	s: <u>2</u>	
Parctice	e: <mark>2</mark>	
Laboi	r: <u>0</u>	
Type of exam:	verbal	

Aims:

To develope structural concepts in a design project with special attention on the aspects of sustainability.

Small descripition:

The task of the course for the students is to deepen their knowledge in structural design through solving specific tasks. Students are required to establish connections between individual structures and produce a design which takes them into account. In some of the lessons students work along guided instructions (using the blackboard), sometimes they need to work individually or in teams. One of the most essential objectives of the subject is to make students learn the preparation process of structural drawing. In this term we deal with the structure of a medium-scale public building. In addition to schedules, architectural plans and cross-sectional views, the students are required to prepare plans for insulation, façades and false ceilings of the building.

The course includes lectures (marked with L) and practices (marked with P) where students work on an architectural design project and have the possibility to further develop the content of the lectures.

Participation requirements during the semester:

Participation on the course. Maximum absences: 2 lessons (2 times 4x45min.).

Requirements to succeed the course/Outcome:

To make a digital presentation of the sustainability concept (figures, perspectives), the different structures and details with the necessary plans, sections for a specific design project. Scale for the plans is M 1:50, for the details is M 1:10.

Participation requirements during the semester:

Participation on the course, Maximum absences: 2 lessons (2 times 4x45min.).

Deadlines/Time schedule:

The presentation is needed to be peresent and hand in digitally by e-mail in a before discussed date during the exam period.

Practice/Consultation opportunities:

Every **Friday** 09:30 – 12:45 Room: **A 318.**

Notes, textbooks, literature to be used/recommended:

Andrea Deplazes: Constructing Architecture, Birkhäuser, Basel, 2008

Course program:

Course program.	LECTURE	PRACTICE
1. week	INTRODUCING	LOADBEARING STRUCTURE AND ENERGY CONCEPT
2. week	ARCHETYPS OF THE STRUCTURES SOLID CONTRUCTION – FILIGREE CONSTRUCTION	
3. week	CONCEPTS OF SUSTAINABILITY STORAGE CONCEPT – INSULATION CONCEPT	
4. week	INSULATION MATERIALS ROCKWOOL, GLASS WOOL, EPS, XPS, FOAM GLASS, RIGID FOAM, WOOD FIBRES, CELLULOSE FIBRE	
5. week	INSULATION CONCEPST AND DETAILS LOADBEARING LAYER INSIDE – LOADBEARING LAYER OUTSIDE	
6. week	CASE STUDY MILD HOME	
7. week	CASE STUD PROJECTS OF DIFFERENT SWISS ARCHITECTS	
8. week	CASE STUDY PROJECTS OF DIFFERENT HUNGARIAN ARCHITECTS	
9. week		LOADBEARING STRUCTURE AND ENERGY CONCEPT
10. week		DETAILS
11. week		DETAILS
12. week	HOLIDAY	HOLIDAY
13. week		DETAILS
14. week		DETAILS
15. week		DETAILS

Pécs, 04.02.2014. Gergely Sztranyák