BUILDING MATERIALS AND PRODUCTS

2020/21. 2. SEMESTER

INFORMATIONS			
COURSE NAME	Építőanyagok és termékek	BUILDING MATERIALS AND PRODUCTS	
COURSE CODE(S)	YCXÉPTEBNF		
DEPARTMENT	Óbuda University, Faculty of Architecture and Civil Engineering, Institute of Civil Engineering		
PROGRAMME, TRAINING	Civil Engineer BSc	full-time	
COURSE INSTRUCTOR (Instructor managing the course) INSTRUCTORS, LECTURERS	Dr. Sándor FEHÉRVÁRI PhD, Associate Professor	fehervari.sandor@ybl.uni-obuda.hu	consulting hours: to be considered later
PRE-REQUIREMENT	Building materials and chemistry		
HOURS OF LECTURES (WEEKLY)	1 hour		
HOURS OF CLASSROOM PRACTICE/ LAB EXERCISE (WEEKLY)	2 hours		
FIELD AND TRAINING (WEEKLY)	0 hours		
ASSIGNMENT	Midsemester tests, homework and exam		
CREDITS	Four credits (ECTS) for Hungarian BSc Students Seven credits (ECTS) for Erasmus Students		
AIM OF THE COURSE; BRIEF DESCRIPTION	Students become familiar with the basic mechanical and physical properties of construction materials. Basic physical, mechanical, and hydromechanical properties of the most important structural materials: iron, steel, timber, ceramics, bricks and masonry elements, artificial and natural stones, glass, and polymers.		
RECOMMENDED LITERATURE	a) Study Aids b) Everett, Alan: Materials. Mitchel's building series. ISBN 0-7134-5442-3		
REQUIRED TECHNICAL APPLIANCES/ SOFTWARE	The use of mobile phones is prohibited during examinations. In the case of online education: Contact: Neptun, E-learning (Moodle) and E-mail. Education materials: According to E-learning (Moodle) Lessons: E-learning, MS Teams		

SCHEDULE OF THE SEMESTER

WEEK	LECTURE	LECTURER	FORM OF PRACTICE	PROGRAM OF PRACTICE
1.	Natural stones	FS	lab exercise	Natural stones, products and properties
2.	Artificial stones	FS	lab exercise	Artificial stones, products and properties
3.	Wood and timber	FS	lab exercise	Wood and timber, products and properties, harmful organisms **Homework study: deadline for building choice (uploading)**
4.	Metals I., construction metals	FS	lab exercise	Metals with express yield stresses
5.	Metals II., joints and corrosion	FS	lab exercise	Metals without express yield stresses
6.	Ceramic products I.	FS	lab exercise	**1st Test: Natural and artificial stones, timbers, metals**
7.	Ceramic products II.	FS	lab exercise	Ceramic products, grouping, properties
8.	Insulation materials	FS	lab exercise	Insulation materials, products, and properties
9.	Waterproofing materials	FS	lab exercise	Waterproofing materials, products, and properties
10.	Polymers used in construction	FS	lab exercise	**2nd Test: Ceramic, insulation, and waterproofing materials**
11.	Glass products	FS	lab exercise	Glass products, grouping and properties
12.	Summarisation	FS	lab exercise	Summarisation **Homework study: deadline for uploading the final study**
13.	Repetition possibility for the tests	FS	lab exercise	Repetition possibility for the tests

The detailed schedule will be uploaded to the E-learning site!

REQUIREMENTS FOR THE COMPLETION OF THE SEMESTER

MID-SEMESTER TASKS AND TESTS

Requirement	Description	Value *(point, %, grade)*
PARTICIPATION AT LESSONS	The practice lessons can be missed up to three times (see § 46 ETVSZ).	-
TESTS	At mid-semester tests (2 pcs) are achievable max. a number of points 60 points: - 1st midterm theory test: Max. 30 points may be obtained, - 2nd midterm theory test: Max. 30 points may be achieved. At least 15 points are to be collected in each test. It will ensure the repetition possibility of both tests at the end of the semester.	*60 points*
HOMEWORK	Homework: Description of a freely chosen building or structures, in respect of its construction materials. Brief history, material recognitions, corrosion states, and a proposal for renovation (techniques and materials). A Guide for Homework study will be uploaded to the E-learning site. At least 20 points are to be collected in this work.	*40 points*
PRE-EXAM / EXAM	Summarizing exam will be held during the examination period. Max. 100 points may be achieved. For this exam, at least 50 points are to be collected.	*100 points*
TOTAL		*200 points*

<table>
<tr><th colspan="6">SEMESTER CLOSING REQUIREMENTS</th></tr>
<tr><td>CONDITIONS FOR OBTAINING A SIGNATURE</td><td colspan="5">Successful midterm tests, proper homework, and adequate participation.</td></tr>
<tr><td>SPECIAL EXAM COMPENSATING THE MIDYEAR TESTS FAILURES</td><td colspan="5">If a student did not fulfil the requirements for obtaining the midyear test requirements but has collected at least 10-10 points in each test, he/she will be provided one occasion to make up for it within the study period in the way of a special exam containing the whole curriculum of the semester. This kind of exam is for the obtention of the semester signature only!
The missing/insufficient homework or inadequate participation cannot be compensated for this special exam.</td></tr>
<tr><td rowspan="3">CONDITIONS FOR OBTAINING AN OFFERED GRADE</td><td colspan="5">50 out of the 60 points in the test and at least 35 in the semester tasks must be reached. Then the points are doubled, and a grade is offered without the exam.</td></tr>
<tr><td colspan="3">170-179 Point</td><td colspan="2">180-200 Point</td></tr>
<tr><td colspan="3">4 - GOOD</td><td colspan="2">5 - EXCELLENT</td></tr>
<tr><td>CONDITIONS FOR ADMISSION TO THE EXAM</td><td colspan="5">Only students who have already obtained a signature can take the exam.
During the exam period, the student must register for the exam in the Neptun system.
The test is a written test with a total value of 100 points.
At least 50 points are to be collected in the exam.
The semester and the exam points are summarised.</td></tr>
<tr><td rowspan="2">EXAM GRADE</td><td>Below 100,0 points</td><td>100-125</td><td>126-149</td><td>150-179</td><td>180-200</td></tr>
<tr><td>1 - FAIL</td><td>2 - PASS</td><td>3 - SATISFACTORY</td><td>4 - GOOD</td><td>5 - EXCELLENT</td></tr>
</table>

Budapest, dated 13rd February 2023

Dr. Sándor Fehérvári (signed)
Course Instructor
Department of Fire Safety and Construction Material Sciences

Approved by:

Dr. Sándor Fehérvári (signed)
Head of the department
Department of Fire Safety and Construction Material Sciences