ANTALYA BİLİM ÜNİVERSİTESİ

DEPARTMENT OF INTERIOR ARCHITECTURE AND ENVIRONMENTAL DESIGN

Course Code	Course Name	Year/Semester	Theory	Practice	Credits	ECTS
IAED 2503	Material and Construction Technologies in Interior Space II	2021 / Fall	2	2	3	5

Level of Course: Undergraduate

Course Type: Core Course

Language of Instruction: English

Course time: 13.30-17.30 – Monday (Sec 1)
13.30-17.30 – Friday (Sec 2)

Course classroom: BB-34

Mode of Delivery: Class Teaching, Assignments, Presentations

Prerequisites and Co-requisites: Prerequisites: IAED 1502
Co-requisites: None

Course Coordinator: Prt. Lec. Begüm SÖYEK ABAY

Name of Lecturer(s): Prt. Lec. Begüm SÖYEK ABAY

Course Teaching Assistant: Lec. Setenay UÇAR

Course Objectives: The aim of the introductive module is providing students with an early knowledge of materials and construction elements, in order to easily enhance a more detailed study in the next module. Comprehension of the influence of material selection on design. Understanding the principles and standards related to the production, use, and application of building materials and components.

Course Description: Materials are taught in relation to construction technologies and design. Main properties of building materials, bonding materials, aggregates, concrete, building stones, ceramics, glass, wood, plastic, metal, plaster, paints and protectors, functional building materials, roof covering materials are taught through practices.

Learning Outcomes: **Upon successful completion of the course, students will be able to:**

- Acquire building materials knowledge and material application skills.
- Gain technical and interdisciplinary communication skills.
- Gain sustainable design skills.
- Gain skills in transferring knowledge and design of environmental systems.
- Have knowledge about building envelope.

Language: The studio classes and discussions will be in English. Developing your verbal language skills will be very important in acquiring the disciplinary terminology as well as daily communication at the class.

Text Books:

1- Rosen, H.J., Heineman, T., "Architectural Materials for Construction", McGraw-Hill Inc., NY, 1996.
2- Toydemir, N., Gürdal, E., Tanacan, L., "Yapı Elemanı Tasarımında Malzeme", Literatür Yayınevi, İstanbul, 2000.

Recommended Text Books:

1- Meta, M.; Scarborough, W.; Armpriest, D., 2009, Building Construction: Principles Materials and Systems, 2nd Ed.,
2- Foster, J.S.; Greeno, R., 2007, Structure and Fabric, part 1; 7th Ed.Pearson
3- Allen,E., 2005, How Buildings Work, the natural order of Architecture, 3rd Ed., Oxford University Press
4- Szokolay, S., Introduction to Architectural Science, the basis of sustainable design, Architectural Press
5- Kocataşkın, F., "Yapı Malzemesi Dersleri", İstanbul Teknik Üniversite Matbaası, Gümüşsuyu, 1973.
6- Salvadori, M. Why buildings stand up. The strength of architecture,W.W. Norton&Company, London, NY
7- Toydemir, N., "Cam Yapı Malzemeleri", Eskişehir: Sakarya Gazetecilik ve Matb. AŞ., 1990.

For the terminology:

Reading Textbooks:

Planned Learning Activities and Teaching Method:

Learning/Teaching Method: The expected learning outcomes for the course will be assessed through: Assignments, a Midterm Exam, a Final Exam and Class discussions and feedback.

Assignments: Students are required to **take quizzes related to the subject of the previous week** throughout the semester.

Class Participation: Regular attendance of all enrolled classes is expected. Do not be late for the class. Attendance will be taken through your signature within the first quarter of the class; if you come later you will be considered absent. At the end of the Semester, your attendance will be reported on UBS. Attendance is compulsory and in case of absenteeism of more than 30%, the system will automatically grade you "FX". If you miss a class, it is your responsibility to 'make up' all work, including items discussed in class. The class contribution will be measured in terms of quality, not quantity. If you need to leave early for whatever reason, you should exercise politeness and notify your professor at the commencement of the session.

Academic integrity & plagiarism: Academic integrity is the pursuit of scholarly activity based on the values of: honesty, trust, fairness, respect, and responsibility. Practicing academic integrity means never plagiarizing or cheating, never misrepresenting yourself, never falsifying information, never deceiving or compromising the work of others. Basically, this means, either intentionally or unintentionally, using the words or ideas of someone else without giving credit, it's strictly forbidden.

Course Textbooks: There is no specific textbook for this course but topics will mainly follow the chapters in the book 'Construction Materials' by Peter Domone and John Illston.

Specific Rules:

1. Be punctual. Punctuality is a sign of respect toward yourself and the others.
2. Show respect for all the people and property around you.
3. Be responsible for your actions and meet all expectations.
4. Follow directions the first time they are given.
5. No candies or gums are allowed in the classroom during classes.
6. Students should raise their hands to signal a question or to answer a question.
7. Students should use the Internet at school for academic purposes only.
8. It is forbidden to record classes with any type of device.
9. Each student has a different learning style. Please create your strategy to learn the topics mentioned in Syllabus.
10. If you request, the instructor may repeat a lecture in the class or the office and explain the subjects that you do not understand.
11. Students will be prepared for market conditions and their professional life during the education period. Everyone will be treated equally and fairly. Please do not expect a privileged or special treatment from your instructor.
12. Please send your requests about the course to the instructor without delay. When the training process is completed, it is not possible to fulfill any demand.

Communication:

If you have any questions about the syllabus, your responsibilities in the course, and assessment procedures please ask your instructor without any delay.

Students are encouraged to visit the professor during their Office Hours. If you cannot make it to announced office hours, please make individual arrangements via e-mail. However, do not expect the professor and the research assistant to respond at length via e-mail to questions of content, the definition of terms, grading questions, etc. If you have a question that requires a substantive response, please set up an appointment to speak with one of us.

Key Works: In this course lectures and assignments mainly focus on the following course content.

Course Contents*: (Weekly Lecture Plan)

Date	Week	Chapter Topic	Take-home exercise
13-17.09.21	**1**	**INTRODUCTION TO THE COURSE** Syllabus, lectures, assignments, evaluation	
20-24.09.21	**2**	**The Building process**	
27.09-01.10.21	**3**	**Building archetypes and materials: Early building systems.** LITHIC MATERIALS	Preparation for quiz

04-08.10.21	**4**	**Building archetypes and materials: Early building systems. (26.02)** WOODEN MATERIALS	Preparation for quiz
11-15.10.21	**5**	**Building archetypes and materials: Early building systems.** EARTH MATERIALS	Preparation for quiz
18-22.10.21	**6**	**Building archetypes and materials: Early building systems.** MORTARS, GLASS, FRAME STRUCTURES	
25-29.10.21 (Republic day)	**7**	**Building Lifecycle:** Post Industrial scenario. (For Sec. II, there will be a make-up course.)	Preparation for midterm exam
01-05.11.21	**8**	**MIDTERM EXAM WEEK**	
08-12.11.21	**9**	**Building elements and their properties:** Foundations	
15-19.11.21	**10**	**Building elements and their properties:** Walls/columns/vertical elements	Preparation for quiz
22-26.11.21	**11**	**Building elements and their properties:** Slabs/beams/horizontal elements	Preparation for quiz
29.11-03.12.21	**12**	**Building elements and their properties:** Roof systems, Composites, tiles, claddings, floorings.	Preparation for quiz
06-10.12.21	**13**	**Building elements and their properties:** Enclosures: Windows/Doors	
13-17.12.21	**14**	**Conclusion, Question-answer session**	
			FINAL EXAM

*PLEASE NOTE: Details of the syllabus and course schedule are subject to minor changes that will be announced in class.

Grading: Midterm and final exam responses will be evaluated for accuracy, thoughtfulness, and clarity. Assignments will be evaluated for content, quality of ideas, and clarity of presentation (including both writing and graphics).

Assessment Methods and Criteria :

METHODS	EFFECTS ON GRADING
Attendance and Participation	5%
Assignments	25%
Midterm Exam	30%
Final Exam	40%

ECTS Workload Table :

		100		
	ACTIVITIES	**NUMBER**	**HOUR**	**WORKLOAD**
	Course Teaching Hours	**13**	**2**	**26**
	Self-study for Assignments	**6**	**3**	**18**
	Assignments	**6**	**2**	**12**
	Self-study for Midterm Exam	**1**	**30**	**30**
	Midterm Exam	**1**	**2**	**2**
	Self-study for Final Exam	**1**	**35**	**35**
	Final Exam	**1**	**2**	**2**
	Total Workload	**0**	**0**	**125**
	Total workload/25			**125/25**
	ECTS			**5**

GRADING AND EVALUATION

The students' progress will be evaluated throughout the semester.

Grade Scale:

GRADE	MARKS	VALUE
A+	100	4.00
A	95-100	4.00
A-	85-94	3.70
B+	80-84	3.30
B	75-79	3.00
B-	65-74	2.70

GRADE	MARKS	VALUE
C+	60-64	2.30
C	55-59	2.00
C-	50-54	1.70
D+	45-49	1.30
D	40-44	1.00
F	0-39	0.00