

Course Code	Course Name	Year/Semester	Theory	Practice	Credits	ECTS
IAED 2503	Material and Construction Technologies in Interior Space II	2020 / Fall	2	2	3	5

Level of Course: Undergraduate

Course Type: Core Course

Language of

Instruction: English

Course time: 15.00-18.50 – Wednesday (Sec 1)
09.00-12.50 – Friday (Sec 2)

Course classroom: Online

Mode of Delivery: Virtual classes, assignments, group works, drawings,

Prerequisites and Prerequisites: IAED 1502

Co-requisites: Co-requisites: None

Course Coordinator: Assoc. Prof. Dr. Mustafa KÜÇÜKTÜVEK

Name of Lecturer(s): Assoc. Prof. Dr. Mustafa KÜÇÜKTÜVEK

Course Teaching

Assistant: Lec. Setenay UÇAR

Course Objectives: The aim of this course is; to understand the principles and standards of construction materials and components of building materials and components during the architectural project design and application stages, to gain the ability to evaluate the functions, types, properties, production and application, conditions, and performances of building materials which are objective inputs of design.

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, heat absorbers, sound-insulating and absorber materials, water and vapour insulation materials, ceiling coverings, 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. Construction Materials' by Peter Domone and John Illston
2. Building Materials' by S. K. Duggal

Recommended Text Books:

3. Meta, M.; Scarborough, W.; Armpriest, D., 2009, Building Construction: Principles Materials and Systems, 2nd Ed., Pearson.
4. Foster, J.S.; Greeno, R., 2007, Structure and Fabric, part 1; 7th Ed. Pearson
5. Allen, E., 2005, How Buildings Work, the natural order of Architecture, 3rd Ed., Oxford University Press
6. Szokola, S., Introduction to Architectural Science, the basis of sustainable design, Architectural Press

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: a midterm project, final project, research project, class drawings, and feedback.

Assignments: Students are required to submit throughout the semester.

In order not to be unfair to our students who submit their Assignments on time, the students who submit delayed submissions will be evaluated over 80 points. There is no late submission for your exams and quizzes.

Course attendance and exam conditions are explained in the relevant regulations of our university.

If you submit your questions about your assignments/exams and requests in online classes, you can easily get answers.

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
7-9.10.20	1	INTRODUCTION TO THE COURSE Syllabus, lectures, assignments, evaluation	
14-16.10.20	2	PRINCIPAL PROPERTIES OF CONSTRUCTION MATERIALS The history of building materials DETAIL DRAWING	-Assignment 1 (Flooring and insulation)



		Flooring and insulation	
21-23.10.20	3	PRINCIPAL PROPERTIES OF CONSTRUCTION MATERIALS II Physical, mechanical properties and characteristic behavior under stress DETAIL DRAWING Drywall Ceiling, Curtain Mechanism, Cove Lighting	-Assignment 2 (Drywall Ceiling, Curtain Mechanism, Cove Lighting)
28-30.10.20	4	CONCRETE Cement, aggregates, water, lime Properties, classification, manufacturing, applications in interior design GYPSUM Properties, classification, manufacturing, applications in interior design DETAIL DRAWING Dividing Drywall, Flooring, Insulation	-Assignment 3 (Dividing Drywall, Flooring, Insulation)
4-6.11.20	5	ROCKS AND STONES Properties, classification, manufacturing, applications in interior design DETAIL DRAWING Staircase and Railing Detail INTERNSHIP PRESENTATIONS	-Assignment 4 (Staircase and Railing Detail)
11-13.11.20	6	STEEL Properties, classification, manufacturing, applications in interior design DETAIL DRAWING Staircase and Railing Detail INTERNSHIP PRESENTATIONS	-Assignment 5 (Staircase and Railing Detail)
18-20.11.20	7	CERAMIC MATERIALS Properties, classification, manufacturing, applications in interior design DETAIL DRAWING Staircase and Railing Detail INTERNSHIP PRESENTATIONS	- Interior Construction Project -Assignment 6 (Staircase and Railing Detail)



25.27.11.20	8	MIDTERM SUBMISSION WEEK	
2-4.12.20	9	POLYMERIC MATERIALS Properties, classification, manufacturing, applications in interior design DETAIL DRAWING Design Studio Flooring, Wall and Ceiling Detail Drawings INTERNSHIP PRESENTATIONS	- Interior Construction Project - Assignment 7 (Flooring, Wall and Ceiling Detail Drawings)
9-11.12.20	10	WOOD AND COMPLEX STRUCTURES Properties, classification, manufacturing, applications in interior design DETAIL DRAWING Design Studio Flooring, Wall and Ceiling Detail Drawings INTERNSHIP PRESENTATIONS	- Interior Construction Project - Assignment 8 (Flooring, Wall and Ceiling Detail Drawings)
16-18.12.20	11	STRUCTURAL CLAY PRODUCTS Properties, classification, manufacturing, applications in interior design DETAIL DRAWING Design Studio Flooring, Wall and Ceiling Detail Drawings INTERNSHIP PRESENTATIONS	- Interior Construction Project - Assignment 9 (Flooring, Wall and Ceiling Detail Drawings)
23-25.12.20	12	COMPOSITE MATERIALS Properties, classification, manufacturing, applications in interior design DETAIL DRAWING Design Studio Flooring, Wall and Ceiling Detail Drawings INTERNSHIP PRESENTATIONS	- Interior Construction Project - Assignment 10 (Flooring, Wall and Ceiling Detail Drawings)
30.12.20 Make-up course for section II	13	SUSTAINABLE BUILDING PRINCIPLES Properties, classification, manufacturing, applications in interior design	- Interior Construction Project

		<p>DETAIL DRAWING Design Studio Flooring, Wall and Ceiling Detail Drawings</p> <p>INTERNSHIP PRESENTATIONS</p>	
6-8.01.21	14	<p>PAINTS, ENAMELS, AND VARNISHES Properties, classification, manufacturing, applications in interior design</p> <p>DETAIL DRAWING Design Studio Flooring, Wall and Ceiling Detail Drawings</p> <p>INTERIOR CONSTRUCTION PROJECT SUBMISSION</p>	
			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).

Quizzes; according to Rectorate's suggestion quizzes will be applied to the students during the online course at any time.

Midterm submission; Assignments (weekly drawings) should be submitted for the midterm.

Interior construction project; 1:10 scale model (the model should include the ceiling, flooring, and two walls of the space), 1:10 scale drawings (plan and section) 50x70cm, Material board 50x70cm, A report "properties of the building materials" and a presentation video of the student (5 minutes)

Final exam/submission (According to Senate decision); There will be drawing and knowledge questions related to the course topic in the final exam. If we cannot have evaluation face to face due to COVID 19, we can give topics and request a final submission.

Assessment Methods and Criteria :

METHODS	EFFECTS ON GRADING
Quizzes	10%
Midterm submission	20%
Interior construction Project	20%
Final exam/submission (According to Senate decision)	50%
	100

ECTS Workload Table :

ACTIVITIES	NUMBER	HOUR	WORKLOAD
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DEPARTMENT OF INTERIOR ARCHITECTURE AND ENVIRONMENTAL DESIGN

Lectures and quizzes	14	2	28
Assignments and midterm submission	14	2	28
Interior construction project	14	4	56
Final exam preparation/submission	1	5	13
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