# TOROS ÜNİVERSİTESİ

Vocational School Construction Technology

## **Course Information**

CONSTRUCTION MATERIALS AND CONCRETE TECHNOLOGY						
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit	
		Hour / Week				
ITP 142	Spring	2	0	2	2	

Prerequisites and co- requisites	None
Language of instruction	Turkish
Туре	Required
Level of Course	Associate
Lecturer	Lect. M. Fadıl ÇAKICI
Mode of Delivery	Face to Face
Suggested Subject	None
Professional practise ( internship )	None
Objectives of the Course	It is aimed to give general information about the general properties of main materials used in construction sector and general information about installation
Contents of the Course	Definition, types, properties and additives used in concrete, concrete, ready-made, materials used in building, aggregates, cement, water, concrete and ready-mixed concrete, description of materials, internal structure, materials of construction, optical, thermal and acoustical, mechanical, physical and chemical properties of materials Construction of site studies of necessary laboratory works on concrete and their materials. Heat insulation methods in buildings, mantle techniques, sandwich panel systems, factors that lead to heat loss in constructions, energy saving.

## Learning Outcomes of Course

#	Learning Outcomes
1	Explain concrete and its components
2	Classifies the qualities of concretes used in the building
3	Evaluates the contents of materials used in construction
4	Explains the importance of concrete and its components in construction

## **Course Syllabus**

#	Subjects	<b>Teaching Methods and Technics</b>
1	Types of building materials, sampling methods	Expression
2	Methods for determination of chemical, physical and mechanical properties of building materials	Expression
3	Determination of concrete components of building materials	Expression
4	Properties and components of metal and wood materials	Expression
5	Upholstery and roofing materials, wall materials and their designation	Expression
6	Heat insulation materials and types.	Expression
7	Midterm	Midterm
8	Sound insulation materials and types	Expression
9	Waterproofing materials and types.	Expression
10	Fireproofing materials and their classification	Expression

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11	Classification of fireproofing materials.	Expression
12	Materials used in building electrical installations	Expression
13	Materials used in building electrical installations.	Expression
14	Materials used in building waste water system and building system heating systems	Expression
15	Repeat of lessons	Expression
16	Final Exam	Final Exam

## **Course Syllabus**

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Osman ŞİMŞEK Construction Materials 1		

#### **Method of Assessment**

#	Weight	Work Type	Work Title
1	20%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam
3	20%	Mid-Term Exam	Mid-Term Exam

## Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Explain concrete and its components	2,4	1,2,3
2	Classifies the qualities of concretes used in the building	2,4	1,2,3
3	Evaluates the contents of materials used in construction	2,4	1,2,3
4	Explains the importance of concrete and its components in construction	2,4	1,2,3

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

#### Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	2	28
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	1	14
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	2	4	8
8	Midterm Exam	2	1	2
9	Quiz	0	0	0
10	Homework	0	0	0
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	7	7
16	Final Exam	1	1	1