ESOGU CIVIL ENGINEERING DEPARTMENT

COURSE INFORMATION FORM

Course Name	Course Code
CONCRETE TECHNOLOGY	151417666

Semester	Number of Course Hours per Week		ECTS
	Theory	Practice	
7	3	0	3

Course Category (Credit)				
Basic Sciences	Engineering Sciences	Design	General Education	Social
	2	1		

Course Language	Course Level	Course Type
Turkish	Undergraduate	Elective

Prerequisite(s) if any	
Objectives of the Course	One of the issues to be special concrete and detailed information about the experimental work done in this regard, evaluating the results of the preparation of a technical writing, presentation and poster preparation.
Short Course Content	Selecting one of the special concretes, collection of information in this issue, an experimental program of work done on this subject and the results obtained from the implementation of this laboratory transformed into a technical writing, preparing presentation, poster work necessary to explain the topic.

Learning Outcomes of the Course	Contributed PO(s)	Teaching Methods *	Measuring Methods **
1 Gathers information on a subject related to concrete technology	1, 7	1,2,5,6,15	A, D
2 Prepares a literature summary on a topic related to concrete technology.	2, 3	1,2	A, D
3 Performs an application on a subject related to concrete technology.	4, 9	1,2,5,6,15	A, D
4 Evaluates the results found on a subject related to concrete technology.	5, 6	1,2,5,6,15	A, D
5 Makes a presentation on a topic related to concrete technology	5, 6	1,2,5,6,15	A, D
6 Prepares a poster on a subject related to concrete technology.	8, 10, 11	15	A, D
7			
8			

***Teaching Methods** **1:**Expression, 2**:**Discussion, **3:**Experiment, **4:**Simulation, **5:**Question-Answer, **6:**Tutorial, **7**:Observation, **8**:Case Study, **9:**Technical Visit, **10:**Trouble/Problem Solving, **11:**Induvidual Work, **12**:Team/Group Work, **13**:Brain Storm, **14:**Project Design / Management, **15:**Report Preparation and/or Presentation

****Measuring Methods** **A:**Exam, **B:**Quiz, **C:**Oral Exam, **D:**Homework, **E:**Report, **F:**Article Examination, **G:**Presentation, **I:**Experimental Skill, **J:**Project Observation, **K**:Class Attendance; **L**:Jury Exam

Main Textbook	Beton, Prof. Dr. Turhan Y. Erdoğan, ODTÜ Geliştirme Vakfı Yay. ve İletişim A.Ş. Yayını, Mayıs 2003.
Supporting References	Beton, C. 1, Prof. Bekir Postacıoğlu, Matbaa Teknisyenleri Basımevi, 1986, İstanbul. Beton, C. 2, Prof. Bekir Postacıoğlu, Matbaa Teknisyenleri Basımevi, 1987, İstanbul. Beton, Necat Cilasun, STFA İnşaat A.Ş. Yayınları, No. 21, İstanbul, 1982. Beton Semineri, DSİ Yayınları, 1984. Beton ve Deneyleri, Ömer Lütfü Beyazıt, DSİ Yayınları. Beton Teknolojisine Giriş, Prof. Dr. M. Süheyl Akman, İTÜ, Ağustos 1994. Beton Teknolojisi, Orhan Özdoğanlar, Bayındırlık Bakanlığı Yayınları, Sayı 79/1. Beton, Türkiye Hazır Beton Birliği, Aralık 1999, İstanbul. Concrete, S. Mindess ve J. F. Young, Prentice-Hall, Inc., 1981. Concrete, C.B. Wilby, Newnes-Butterworths, 1977. Properties of Concrete, A. M. Neville, Pitman Publishing Limited, 1978. Admixtures for Concrete, Prof. Dr. T.Y. Erdoğan, METU, 1997.
Necessary Course Material	

Course Schedule	
1	Selecting an special concrete issue of Concrete Technology
2	Collection of information on the selecting issue of Concrete Technology
3	Collection of information the selecting issue of Concrete Technology
4	Review of the literature on the selecting issue of Concrete Technology
5	Preparation of case study on the selecting issue of Concrete Technology
6	Laboratory study on the selecting issue of Concrete Technology
7	Laboratory study on the selecting issue of Concrete Technology
8	Mid-Term Exam
9	Evaluating the results of laboratory study
10	Paper preparation according to Teknik Dergi (Digest) (Turkish)
11	Paper preparation according to Teknik Dergi (Digest) (Turkish)
12	Paper preparation according to a foreign journal (English)
13	Paper preparation according to a foreign journal (English)
14	Preparation of presentation of the manuscript, Handouts Preparation, (PowerPoint)
15	Preparation of Poster, such as on the ESOGÜ, MMF Web page.
16,17	Final Exam

Calculation of Course Workload			
Activities	**Number**	**Time (Hour)**	**Total Workload (Hour)**
Course Time (number of course hours per week)	14	3	42
Classroom Studying Time (review, reinforcing, prestudy,….)	14	1	14
Homework	2	3	6
Quiz Exam	1	0	0
Studying for Quiz Exam	1	0	0
Oral exam	1	0	0
Studying for Oral Exam	1	0	0
Report (Preparation and presentation time included)	1	0	0
Project (Preparation and presentation time included)	1	0	0
Presentation (Preparation time included)	1	0	0
Mid-Term Exam	1	2	2
Studying for Mid-Term Exam	1	14	14
Final Exam	1	2	2
Studying for Final Exam	1	10	10
		Total workload	**90**
		Total workload / 30	**3**
		Course ECTS Credit	**3**

Evaluation	
Activity Type	**%**
Mid-term	40
Quiz	
Homework	10
Bir öğe seçin.	
Bir öğe seçin.	
Final Exam	50
Total	100

RELATIONSHIP BETWEEN THE COURSE LEARNING OUTCOMES AND THE PROGRAM OUTCOMES (PO) (5: Very high, 4: High, 3: Middle, 2: Low, 1: Very low)

NO	PROGRAM OUTCOME	Contribution
1	Sufficient knowledge of engineering subjects related with mathematics, science and civil engineering; an ability to apply theoretical and practical knowledge on solving and modeling	4
2	Ability to determine, define, formulate and solve complex civil engineering problems; for that purpose an ability to select and use convenient analytical and experimental methods.	3
3	Ability to design a complex system, a component and/or an engineering process under real life constrains or conditions, defined by environmental, economical and political problems; for	4
4	Ability to develop, select and use modern methods and tools required for civil engineering applications; ability to effective use of information technologies.	4
5	In order to investigate civil engineering problems; ability to set up and conduct experiments and ability to analyze and interpretation of experimental results.	3
6	Ability to work effectively in inner or multi-disciplinary teams; proficiency of interdependence.	4
7	Ability to communicate in written and oral forms in Turkish/English; proficiency at least one foreign language.	3
8	Awareness of life-long learning; ability to reach information; follow developments in science and technology and continuous self-improvement.	3
9	Understanding of professional and ethical issues and taking responsibility	3
10	Awareness of project, risk and change management; awareness of entrepreneurship, innovativeness and sustainable development.	3
11	Knowledge of actual problems and effects of engineering applications on health, environment and security in global and social scale; an awareness of juridical results of engineering	4

LECTUTER(S)				
Prepared by	Prof. Dr.İlker Bekir TOPÇU			
Signature(s)				

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