COURSE IDENTIFICATION FORM

Course Code and Name: IM5047 ADVANCED FOUNDATION CONSTRUCTION				**Department of :** MASTER'S PROGRAM IN CIVIL ENGINEERING WITH THESIS			
Semester	**Theoretic Hour**	**Practice Hour**	**Total Hour**	**Credits**	**ECTS**	**Education Language**	**Type: Compulsory Elective**
Fall	3	0	3	3	5	Turkish	Optional
Prerequisite (s)							
Instructor		Assist. Prof. Özlem ERDEM				**Mail : osenerdem@munzur.edu.tr** **Web :**	
Course Assistant						**Mail :** **Web :**	
Groups / Classes							

Course Aim	Explaining advanced theory and practice in Foundation Engineering to the student. It is aimed to introduce the newest technology in Foundation Engineering to the student.
Course Goals	
Course Learning Outs and Proficiencies	• Soil investigation and field studies • Slope stability • Horizontal earth pressures and retaining structures • Superficial foundations • Deep foundations
Course Basic and Auxiliary Contexts	• Lecture Notes • Caduto, D.P., Foundation Design:Principles and Practices,Second Edition, Prentice Hall , 2001 • Tomlinson, M.J. , Foundation Design and Construction ,prentice Hall , 2001 • Bowles, J.E., Foundation Analysis and Design , McGraw Hill, 1997 • Das, M.B., Principles of Foundation Engineering, Third ed., Int.Thompson Publ. 1995
Methods of Give a Lecture	Lecture, Discussion on case studies, Demonstration (telling and doing by showing, making the student do it)

Assessment Criteria		**If Available, to Sign (x)**	**General Average Percentage (%) Rate**
	1. Quiz	**X**	**50**
	2. Quiz		
	3. Quiz		
	4. Quiz		
	5. Quiz		
	Oral Examination		
	Practice Examination (Laboratory, Project etc.)		
	Final Exam	**X**	**50**

Semester Course Plan

Week	**Subjects**
1	Introduction to basic mechanics
2	Land inspection
3	Research studies in the field
4	Slope stability problems
5	Slope stability analysis
6	Horizontal soil pressures
7	Deep excavations and retaining structures
8	MIDTERM EXAM
9	Retaining structure dimensioning
10	Surface foundations
11	Surface foundation analysis
12	Deep foundations
13	Deep foundation analysis
14	Foundation design with empirical methods