COURSE IDENTIFICATION FORM

Course Code and Name: IM5029 ENGINEERING PROPERTIES OF SOILS				**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	The basic principles of soil mechanics and the principles of their use in engineering applications, describing the engineering properties of soils and the factors that control these properties, identifying situations where the soil is a factor in engineering problems or environmental problems and understanding the parameters and limits of these parameters in solving such problems and developing skills and providing technical competence.						
Course Goals							
Course Learning Outs and Proficiencies	• To master the experiments to determine the geomechanical properties of soils • To be able to determine soil types • Analyze the compaction process • To be able to determine the permeability of soil • To be able to comprehend the stress state in soils. • To be able to analyze the settlement problem in soils both experimentally and theoretically. • To be able to analyze the data of shear strength experiments.						

Course Basic and Auxiliary Contexts	• Lecture Notes • McCarthy,D.F. (1993) Essentials of Soil Mechanics and Foundations, Prentice Hall Inc. • Holtz, R.D. & Kovacks, W.D., (1981) An Introduction to geotechnical Engineering, Prentice Hall Inc. • Lambe, T.W.&Whitman R.W. (1980) Soil Mechanics, John Wiley & Sons Inc.
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 soil mechanics
2	Soil structure and its components
3	Soil classification methods
4	Compaction
5	Permeability of soils

6	Effective stress, stress-deformation relationship in soil
7	Stress in the soil mass
8	MIDTERM EXAM
9	Calculation of the amount and duration of seating
10	Consolidation experiment
11	Consolidation experiment evaluations
12	Shear strength theory
13	Shear strength tests
14	Shear strength test evaluations