



#### **Planning and Quality Assurance Affairs**

# **Course Specifications**

General Information		
Course name	Soil mechanics	
Course number	GEOL4335	
Faculty		
Department		
Course type	Major Needs	
Course level	4	
Credit hours (theoretical)	2	
Credit hours (practical)	1	
<b>Course Prerequisites</b>		

## **Course Objectives**

- 1 Studying the soil physical properties
- 2 Soil sampling
- 3 Lab tests for constructions and foundations

### **Intended Learning Outcomes**

Knowledge and Understanding	*	The student should take enough knowledge about the soils and their tests for
		constructions and foundations

#### **Course Contents**

- 1 In this course the student study in details the mechanical properties of soil; learn the methods of soil tests in engineering site
- Practical part Study the tests needs for the engineering projects as, plastic limit, liquid limit, shrinkage limit, compression test and field density

#### **Teaching and Learning Methods**

- 1 Explanation and discussion with presentation devices
- 2 Experiments in field and lab
- 3 Exercises in La

#### **Students Assessment**

Assessment Method	TIME	MARKS
Final term exam	In seventh week	10
Second term exam	In eleventh week	10
Exercises and practical assignments	lab and field tests	10
Final practical exam	In fourteenth week	20
Final term exam	In sixteenth week	50

# **Books and References**

Course note	Lecture notes
Essential books	Murthy, V.N.S. (1992), Soil Mechanics & Foundation Engineering in SI Units
Recommended books	Punmia, B.C. (1994), Soil Mechanics and Foundations
	Roberts. (1996), Understanding Soil Mechanics
	John Atknson. (1993), An Introduction to the Mechanics of Soils and Foundations
	Craig R. F. (1997), Soil Mechanics