

Course title : Soil mechanics

Course Basic Information			
Academic Unit:	Faculty of Civil Engineering		
Course title:	Soil Mechanics		
Level:	BSc		
Course Status:	Obligatory		
Year of Study:	Second (II), IV th semester		
Number of Classes per Week:	2+2		
ECTS Credits:	6		
Time /Location:	8 ¹⁵ -11 ⁰⁰ ; Room S-413		
Teacher:	Prof. Dr. Neritan Shkodrani		
Contact Details:	Email: Tel:		
Course Description:	<p>Course Soil mechanics includes: Soil exploring from the surface of the ground, "In Situ" tests. Soil porosity, specific gravity and volume weight, soil moisture and consistency, soil compression, laboratory and field examinations. Soil drainage, laboratory tests for determination of coefficient of soil filtration in laboratory and field . Shear strength of soil. Compressibility of soil. Distribution of stress in soil mass, Boussinqq equations, Steinbrenner and Newmark method. Consolidation of the soil. Slope stability. Earth pressures on the retainig wall. Soil bearing capacity.</p>		
Course Goals:	<p>Course Objectives: Understand the basic principles of soil Mechanics, which will later be used for the analysis of the stability of various constructions in civil engineering.</p>		
Expected Learning Outcomes:	<p>Upon completing the lectures of this course, students will have understood the fundamentals of soil mechanics, will be able to carry out laboratory testing and field tests, interpretation of laboratory examination data, and field examinations. To possess the application of physico-mechanical and engineering features in engineering practice, to know all calculation methods during stability analysis, to compile the test program for the "Geomachanic Elaboration" of the site of the respective construction facility.</p>		
Student Workload (should be in compliance with student's Learnign Outcomes)			
Activity	Hours	Day/ Week	Total

Lectures	2	15	30
Theory/ Lab Work	1	5	5
Practical Work	0	0	0
Contact Hours with Teacher /Consultations during Office Hours	1	15	15
Field Work	1	15	15
Colloquium, Seminars	2	2	4
Homework	2	15	30
Self-study Time (in the Library or at Home)	1	15	15
Final Exam Preparation	2	15	30
Evaluations (Tests, Quiz, Final exam)	2	1	2
Projects, Presentations, etc.	2	2	4
Total			150

Teaching Methods:

Lectures, exercises and elaborates, "In situ"

Assessment Methods:

In the assessment should be assigned the percentage of each estimate intermedier partial or final assessment. One of the ways the assessment would have been as follows:
The first assessment: 25%
Homework or other commitments 10%
Regular attendance 10%
Final Exam 55%
Total 100%

Primary Literature:

- [1] Dr.sc. Qani V. KADIRI, Authorised lecture of Soil Mechanics, Faculty of Civil Engineering & Arhitecture, Prishtinë
- [2] Dr. Sc. Fikret Ahmedi, Soil Mechanics, Faculty of Civil Engineering & Arhitecture, Prishtinë
- [3] Braja Das, Principle of Geotechnical Engineering, USA

Additional Literature:

- [4] Prof.Dr. Ervin Nonweiler, Mehanika tla i temeljenje gradevina, Zagreb
- [5] V.N.S Murthy, Geotechnical Engineering, USA

Designed teaching plan

Week	Title of the Lecture
Week 1:	Classification and qualitative identification of soils
Week 2:	Subsoil exploratiob from the surface of the ground
Week 3:	Soil phase (mineralogical and chemical composition, structure, texture, water in soil, capillary rise)
Week 4:	Porosity of soil, volume weight, humidity, soil consistency (limits and consistency indexes)
Week 5:	Soil compaction
Week 6:	Water permeability of soil

Week 7:	Shear strength of soil
Week 8:	Compressibility of soil
Week 9:	Stress distribution in a soil mass
Week 10:	Settlement calculation from laboratory data and "in situ" tests
Week 11:	Soil consolidation
Week 12:	Slope stability
Week 13:	Slope stability-continue
Week 14:	Lateral earth pressure
Week 15:	Soil bearing capacity

Academic Policies and Code of Conduct

The teacher assigns the criteria for regular attendance in classes and rules of conduct, to maintain the peace in teaching, disconnected mobile phones, entrance in room with time, etc.)