

Faculty of Technology

School of Higher Education (Construction)

Session: **2015 / 2016 (second semester)**

SCHEME OF WORK / RECORD OF WORK (as ticked & dated)

HIGHER NATIONALS in CIVIL ENG – unit 32 Engineering Geology & Soil Mechanics

Angelo Filomeno

Tuesday pm class - HA CIVILS(YR 1)

CLASS COMMENCING Tuesday 2ndth February 2016

Teac h week No.	Date	Topic to be covered in class	Type of Teaching to take place	Homework tasks and tests	Practical Work	Associated tasks	PORTFOLIO TO BE SUBMITTED WITH THE FOLLOWING
			(eg Pedagogic, Practical, Self Directed Research, Tutorial, Assessment)				
1	28- January	INDUCTION Introduction to the unit, assignment requirements	INDUCTION				
2	4- Feb	Classification of rocks	Identification of common rocks				
3	11- Feb	Soils and rocks for construction	Characteristics of sand, gravel, crushed stone for construction				
4		Half term					
5	25- Feb	Soil description and classification- Current code of practice	Practice of soil classification				
6	4- March	Site visit					

	7	11- Mar	Soil properties – three phase model	Calculation of basic soil properties				
	8	18- Mar	Soil density, moisture content, void ratio,...	Calculation and practice				
	9	25- Mar	Soil particle size analysis	Presentation of first assignment				
	10	1 – April	Strength of soil - revisions	Calculations and revisions				
	11		easter					
	12		easter					
	13	22- Apr	Feedback on assignment Soil effective stress- influence of water	Lecture, practice				
	14	29- Apr	Working on second assignment	Calculations and practice				
			Flow net- soil under hydrostatic conditions	Practice				
	15	6- May	Calculation and graphs, total stress, effective stress for soil in different conditions					
	16	13-May	Geotechnical design parameters- common methods of determining soil strength					
	17	20-May	Ground investigation and in-situ sampling	Practice				
	18	27-May	Laboratory measurement	Practice and calculations				
	19	3- June	Permeability – pumping test analysis					
	20	10-June	Revision - Final assignment					