

Course title :

Course Basic Information			
Academic Unit:	Faculty of Civil Engineering		
Course title:	Land surveying		
Level:	Bachelor		
Course Status:	Mandatory		
Year of Study:	Year 2, Semester 3		
Number of Classes per Week:	2+2		
ECTS Credits:	6		
Time /Location:	According to the Timetable		
Teacher:	Prof.Ass.Dr. Ismail Kabashi		
Contact Details:	Ismail.kabashi@uni-pr.edu + 377 44 325 819		
Course Description:	<i>The course starts with basic principles of land surveying, coordinate systems, cartographic projection Gauss-Kruger, basic definitions of GPS surveying, polygonal networks and continues with leveling networks to end with the referencing height surfaces.</i>		
Course Goals:	<i>To achieve teoretical and practical knowledge about the classic and moders surveying techniques.</i>		
Expected Learning Outcomes:	<i>After finishing this course the student will be able to:</i> <ul style="list-style-type: none"> - <i>Develop basic knowledge in solving basic problems in geodesy</i> - <i>Knowledge about basic measuring techniques</i> 		
Student Workload (should be in compliance with student's Learning Outcomes)			
Activity	Hours	Day/ Week	Total
Lectures	2	15	30
Theory/ Lab Work/Exercises	2	15	30
Practical Work	1	15	15
Study for intermediate test	1	13	13
Consultations with the teacher	1	15	15
Field Work			
Test, seminar paper	4	2	8
Homework	1	13	13
Self-study (library or home)	1	13	13
Preparation for final exam	1	15	15
Assessment time (test, quiz, final exam)			
Projects, presentations, etc.			
Total			152
Teaching Methods:	<i>Lectures, Discussions Exercises Team Work</i>		

Assessment Methods:	First Valuation: 15% Second Valuation: 15% Homework: 10% Participation on the lectures: 5% Final Exam: 55% Total: 100%
Primary Literature:	1) Kahmen, H. Vermessungskunde, Berlin, 2005 2) Bencic, D. Instrumentet per matje dhe sistemet ne gjeodezi dhe gjeoinformatike.
Additional Literature:	1. Jekeli, Ch.: Geodetic Reference Systems in Geodesy, Ohio State University, 2006.

Designed teaching plan	
Week	Title of the Lecture
Week 1:	Basic definitions and principles of land surveying
Week 2:	Geodetic network for land surveying and its stabilization and the measuring units.
Week 3:	Coordinative systems, Gauss-Kruger projection
Week 4:	<i>Basic definitions of triangulation. The coordinate calculation base.</i>
Week 5:	Basic definitions of GPS measurements, surveying methods and the connection to earth systems.
Week 6:	Polygonal networks
Week 7:	<i>Developing polygonal networks in the field</i>
Week 8:	Measurement of angels and uncertainty of angel measurements. The measurement accuracy and the tolerance in angel measurements.
Week 9:	Linear measurements in polygonal networks
Week 10:	Correction of linear measurements and reduction of the lines in ellipsoid surface.
Week 11:	Calculation of coordinates for polygonal points and calculation of coordinates for the points in the "Linear" network
Week 12:	Leveling. General concepts, leveling methods. General leveling and stabilization of leveling points-"repers"
Week 13:	Calculations in the leveling networks
Week 14:	Heights system and vertical datum. Orthometric heights, above sea heights, and geopotential heights. Relations between different heights.
Week 15:	Surveying methods. Polar method, RTK surveying.

Academic Policies and Code of Conduct	
-	<i>Regular attendance of the lectures and excersises</i>
-	<i>Mobile phones are not allowed</i>

Note | If a student has more than 3 class assignments evaluated below 50% he/she loses the right on taking the final exam. Evaluation is done from 0-100 %.