Course title :

Course Basic Information	
Academic Unit:	Faculty of Civil Engineering
Course title:	Basics of geodesy
Level:	Bachelor
Course Status:	Mandatory
Year of Study:	Year 1, Semester 2
Number of Classes per Week:	2+2
ECTS Credits:	6
Time /Location:	According to the Timetable
Teacher:	Prof.Ass.Dr. Ymer Kuka
Contact Details:	ymer.kuka@uni-pr.edu +383 44 224 853
Course Description:	The course begins with the knowledge on form and size of earth, geodesy definitions, information on ellipse, and then continues with the classic methods of determining the coordination of point, state triangulation and ends up with the calculating methods of coordination in Cartesian 2D system.
Course Goals:	The main objective of this course is to develop basic knowledge on main duties of geodesy and calculation of referential geodetic systems.
Expected Learning Outcomes:	After finishing this course the student should be able to: - Gain basic knowledge in the geometry of ellipse and cartographic projections - To make the needed calculations in ellipse - To understand geodetic datum and coordinative transformations

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			
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.	1	15	15
Total			**152**

Teaching Methods:	-Lecture -Discussion during lectures -Exercises -Team work
Assessment Methods:	In evaluation, the percentage of the attendance of each partial evaluation in the final evaluation must be determined. One of the ways of evaluation would be: First Evaluation: 15% Second Homework or other engagement: 10% Attendance 5% Final Exam 55% Total 100%
Primary Literature:	1) Torge, W.: Geodesy, 3rd Edition, Walter de Gruyter, 2001. 2) Bauer, M.: Vermessung und Ortung mit Satelliten, Wichmann verlag, 2003
Additional Literature:	1) Nela, K.: Gjeodezi Praktike I, 2005 2) Nela, K.: Gjeodezi Praktike II, 2005

Designed teaching plan

Week	Title of the Lecture
Week 1:	General notions
Week 2:	Coordinates and coordinate systems
***Week 3*:**	Standard surveys
Week 4:	Theory of errors
Week 5:	Assessment of accuracy of survey results
***Week 6*:**	Mean error of the function of measured sizes
Week 7:	Equalize results from direct measurements
Week 8:	The length measurement First valuation
Week 9:	Geodetic instruments
Week 10:	Measurement of horizontal angles
***Week 11*:**	Measurement of vertical angles
***Week 12*:**	Polygon network
***Week 13*:**	Leveling network
***Week 14*:**	Geodetic plans
***Week 15*:**	Global Positioning System (GPS) Second valuation

Academic Policies and Code of Conduct

- Regular attendance of lectures and exercises
- Being quiet during the sessions
- Shutting down mobile phones
- Being on time

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