Subject Title: Plates and shell

Course Basic Information	
Academic Unit:	**Civil Engineering Faculty**
Course title:	**Plates and shell**
Level:	**Master**
Course Status:	**Elective**
Year of Study:	**first(I), semester I**
Number of Classes per Week:	**2+2**
ECTS Credits:	**6**
Time /Location:	**9:15-12:00; S 513**
Teacher:	**Prof.ass.dr. Hajdar Sadiku**
Contact Details:	**Email: hajdar.sadiku@uni-pr.edu**
Course Description:	Content: The course contains two main parts: the theory of bending of thin plates and the theory of shells. The first part includes rectangular plates and circular varnishes. The second part analyzes the rotating shells, as well as the cylindrical rotating shells and those with a general shape.
Course Goals:	It is that after the determination of the shear forces the students are able to dimension them by determining the dimensions of their cross sections and to determine the amount of reinforcement
Expected Learning Outcomes:	Learning outcomes of the course: After completing the course the student will be able to know, understand and use correctly the basic notions of construction science in general, in the field of slab holders and shell in particular, in order to easily cope with the difficulties that await him during and after these studies.

Student Workload (should be in compliance with student's Learnign Outcomes)			
Activity	**Hours**	**Day/ Week**	**Total**
Lectures	3	15	45
Theory/ Lab Work/Exercises	2	15	30
Practical Work	0	0	0
Consultations with the teaher	0	0	0
Field Work	1	15	15
Test, seminar paper	0	0	0
Homework	1	3	3
Self-study (library or home)	0	0	0
Preparation for final exam	2	15	30
Assessment time (test, quiz, final exam)	2	12	24
Projects, presentations, etc.	3	1	3
Total			**150**

Teaching Methods:	Lectures, exercises during class using different materials, one project work in group of 2-3 students (independent work), individual homework
Assessment Methods:	The pass rate of the course is 60%. Student attendance 10%; Assessment from tests 60%; Final exam 30%.
Primary References	Musa Stavileci: Teoria e sistemeve sipërfaqësore, UP, FNA, Prishtinë, 1997 Stavileci M.: Teoria e sistemeve sipërfaqesore – detyra të zgjidhura, UP, FNA Prishtinë, 1997,
Additional References:	Girkman K.: Flachentragwerke, Wien, 1959 Timoshenko S.: Theory of plates and Shells, New York,1965

Designed teaching plan	
Week	**Title of the Lecture**
Week 1:	Mechanical properties of materials
Week 2:	Solution of free supported plate on four sides through double trigonometric series-Navier method Navier's solution to the rectangular plate problem
***Week 3*:**	Utilizing the Navier solution for different load cases
Week 4:	Long plates
Week 5:	Plate freely supported on two sides facing each other and any other two conditions- Solution according to the single trigonometric series-Solution according to Maurice Levy
***Week 6*:**	Utilizing the Maurice Levy solution for various load cases
Week 7:	Finite difference method
Week 8:	Finite element method
Week 9:	Circular plates
Week 10:	Contour conditions for circular slabs and annular slabs
***Week 11*:**	General knowledge on shells
***Week 12*:**	Spherical shells
***Week 13*:**	Conical shell
***Week 14*:**	Cylindrical shell
***Week 15*:**	Shell deformities

Academic Policies and Code of Conduct

We start and finish class on time.
Tools used during class must be cleaned and stored away at the end of class. Mobile/smart phones, and other electronic devices (e.g. iPods) must be turned off (or on vibrate) and hidden from view during class time.
Laptop and tablet computers are allowed for quiet use only; other activities such as checking personal e-mail or browsing the Internet are prohibited