Course title: Spatial Data Infrastructure

Course Basic Information	
Academic Unit:	Faculty of Civil Engineering
Course title:	Spatial Data Infrastructure
Level:	Master
Course Status:	Mandatory
Year of Study:	Year 1, Semester I
Number of Classes per Week:	2+2
ECTS Credits:	6 ECTS
Time /Location:	According to the Timetable
Teacher:	Prof Ass. Dr. Ymer Kuka
Contact Details:	ymer.kuka@uni-pr.edu
Course Description:	In this course, students will explore theoretical and practical concepts of Spatial Data Infrastructures (SDIs). They will study fundamental concepts of SDI and the important factors that affect the development of SDI. Furthermore, techniques for design, implementation, management, and evaluation of SDIs will be explored. This course also includes practical and theoretical exercises relevant to current status of spatial data management and sharing, development of clearinghouse networks, SDI evaluation, and spatially enabled-society.
Course Goals:	The aim of the course is that students should have acquired on completion of the course the following knowledge and skills: Knowledge and understanding
Expected Learning Outcomes:	After completion of this course, students should be able to do as following: - Describe the importance of spatial data for planning, decision making and sustainable development - Describe the current status/the problems for spatial data in terms as availability, accessibility, applicability and usability - Describe the general the concepts and the aims for Spatial Data Infrastructure and the importance of data exchange - In detail, explain and understand the main components of a SDI

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			
Consultations with the teaher			
Field Work			
Test, seminar paper	3	4	12
Homework	1	10	10
Self-study (library or home)	2	15	30
Preparation for final exam	8	12	16
Assessment time (test, quiz, final exam)	3	2	6
Projects, presentations, etc.	8	2	16
Total			**150**

Teaching Methods:	- *Lecture* - *Discussion during lectures* - *Exercises* - *Work in group*
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 Evaluation: 15% Homework or other engagement: 10% Attendance 5% Final Exam 55% Total 100%
Primary Literature:	1.Masser, I. (2007). Building European SDI, ESRI Press 2. Manuali zhvillimit te Infrastruktures se te dhenave Hapesinore, Bashkim Idrizi, Shkup 2019
Additional Literature:	1. Crompvoets, J., Rajabifard, A.,Bregt, A., Williamson, I. (2004). Assessing the world wide developments of national spatial data clearinghouses, International Journal of Geographical Information Sciences, 18, 1-25. 2. Toomanian, A., Mansourian, A., Harrie, L., Ryden, A. (2011). Using Balanced Scorecard for Evaluation of Spatial Data Infrastructures: a Swedish Case Study in accordance with INSPIRE, International Journal of Spatial Data Infrastructures Research, 6, 311- 343 3. Williamson I.P., Rajabifard, A. and Feeney, M. E. F. (2003). Developing Spatial Data Infrastructure: from concept to reality, London & New York: Taylor & Francis. 4. Spatial Data Infrastrukture cookbook 2012 in Albanian, Bashkim Idrizi, Janar 2013

Designed teaching plan

Week	Title of the Lecture
Week 1:	Existing status for spatial data.
Week 2:	SDI components and their nature.

***Week 3*:**	Factors that influence the SDI development
Week 4:	INSPIRE Directive
Week 5:	Policy impact, influence and covergence
***Week 6*:**	SDI policy
Week 7:	Existing SDI assesment
Week 8:	Creation of meta data
Week 9:	Clearinghouses of different generations.
Week 10:	Inter-operability and International standards for these.
***Week 11*:**	Introduction to service composition.
***Week 12*:**	Cartographic aspects of geo-portals.
***Week 13*:**	SDI modelling and evaluation.
***Week 14*:**	The spatial activated the society ("spatial-enabled society").
***Week 15*:**	Study case

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.

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 %.