

PL2108 Geographic Information System in Planning

Module designation	Geographic Information System in Planning
Semester(s) in which the module is taught	3 rd Semester (second year of undergraduate program)
Person responsible for the module	
Language	Indonesian
Relation to curriculum	Compulsory course for the Undergraduate Program in Urban and Regional Planning
Teaching methods	<ol style="list-style-type: none"> 1. Lecture 2. Case study 3. Problem-based learning 4. Practicum 5. Self-direct learning 6. Small-group discussion 7. Contextual instruction
Workload (incl. contact hours, self-study hours)	<p>(Estimated) Total workload: around 12 hours per week x 16 weeks = 192 hours</p> <p>Contact hours:</p> <ul style="list-style-type: none"> • Face to face teaching: 4 hours x 14 weeks = 64 hours • Structured activity: 4 hours x 16 weeks = 64 hours • Exam: 4 hours x 2 weeks = 8 hours <p>Private study including examination preparation: Self-study hours: 4 hours x 16 weeks = 64 hours</p>
Credit points	4 CU/6.67 ECTS
Required and recommended prerequisites for joining the module	Basic course
Module objectives/intended learning outcomes	Students understand the function of map as an input and analytical tool, and the importance of information for planning. With the knowledge, students are able to develop or think in the context of information system
Content	This course will introduce the need of spatial data for planning process (as an input, process as well as output). This course also consists of knowledge about information system (framework of information system, basic requirements, hardware and software interfaces, etc) for planning process. The principles of information system, from the importance of data/information, characteristics and position of data/information in spatial dimension and time, management aspects, as well as many kinds of data/information for different type of spatial planning will be introduced in this course. At the end of course, the student should have the capability for thinking in systematic framework along the planning process. Recent development in ICT for helping the analysis in planning process (GIS, Data Base Management, etc) will be introduced, so the student can take the benefit of those development and implement it in planning process and development.
Examination forms	Mid Exam (25%), Final Exam (35%), Assignment (40%)
Study and examination requirements	Lectures, Group Assignments, and Individual Assignments (Problem Set), Quizzes
Reading list	<ol style="list-style-type: none"> 1. Cartography: Visualization of Geospatial Data; Kraak, Menno-Jan and Ormeling, Ferjan; Prentice Hall; 2nd Edition; 2003, [Pustaka Utama Prioritas-1] (KRA) 2. Geomatics, Kavanagh, Barry F; Prentice Hall; 2003 (KAV) 3. Geographic Information Systems: A Management Perspective; Aronoff, Stan; WDL Publications, 1989 (ARO) 4. Robinson, Arthur H., Morrison, Joel L., Muehrcke, Philip C., Kimerling, A. Jon., Guptill, Stephen C. Elements of Cartography. John Wiley and Sons, Inc; 6th Edition; 1995. [Pustaka Utama Prioritas-2](AM)