MODULE HANDBOOK

Spatial Data Base Management

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Undergraduate Study Program for Geography
Faculty of Mathematics and Natural Sciences
Universitas Indonesia

Module designation	Spatial Data Base Management
Semester(s) in which the module is taught	Fifth (5th) Semester
Person responsible for the module	Adi Wibowo, Ph.D.
Lecturer	1. Adi Wibowo, Ph.D. 2. Iqbal Putut Ash Shidiq, M.Sc., Ph.D 3.
Language	Bahasa Indonesia
Relation to curriculum	Elective
Teaching methods	Student-centered Learning and combination with Cooperative Learning
Workload (incl. contact hours, self-study hours)	1. Lectures: 100 minutes per week per semester 2. Assignment: 120 minutes per week per semester 3. Independent study: 120 minutes per week per semester 4. Minutes x weeks x semester: 340 x 14 x 1 = 4760 minutes per semester 5. Midterm Examination: 100 minutes per semester 6. Final Examination: 100 minutes per semester 7. Total workload per semester: 4950 minutes / 82 hours 40 minutes
Credit points	2 (Two)
Required and recommended pre-requisites for joining the module	1. Geographic Information System 2. Geographic Information System Lab
Module objectives/intended learning outcomes	The learning achievement of this course is that students are able to formulate database management for spatial data using geographic information system software. The learning method used and trained is to interactive lectures and active learning through small group discussions and case studies-based learning. The language of introduction used in this lecture is Indonesian.
Content	1. Basic Concepts of Spatial Database Management in GIS 2. Benefits and Uses of GIS Data Base Management 3. Procedure in spatial database management in GIS 4. Formulation of a spatial database for certain case studies 5. Application of GIS Data Base Management procedures in making Data Base Management in certain case studies
Examination forms	-
Study and examination requirements	1. Individual Score (35%) 2. Group and Presentation Score (20%) 3. Mid Examination (15%) 4. Final Examination (30%)

Reading list	Supriatna, (2001), Dasar-Dasar Sistem Informasi Geografis. Departemen Geografi FMIPA UI, Depok, Indonesia
	Supriatna (2009): Sistem Informasi Geografis, Analisis & Aplikasi. Departemen Geografi FMIPA UI, Depok, Indonesia
	David L. Verbyla, (2002): Practical GIS Analysis, Taylor & Francis, London, UK
	Edy Irwansyah (2013),Sistem Informasi Geografis : Prinsip Dasar dan Pengembangan Aplikasi (2013), DIGIBOOKS, Yogjakarta, Indonesia
	Rustiadi, E., 2018. Perencanaan dan pengembangan wilayah. Yayasan Pustaka Obor Indonesia.
	Howe,D.R, 1992. Data Analysis for Database Design. International Institute for Aerospace & Earth Sciences ITC, Netherland
	De Mers, 2000. Fundamentals of Geographical Information Systems, John Wiley & Sons, Inc. New York.
	Laurini & Thomson, 1996. Fundamentals of Spatial Information Systems. Academic Press, London.
	Michael, B. (1996). GIS & Environmental Modelling: Progress & Research Issue. New York: GIS World Books, Fort Collins.