MODULE HANDBOOK

BASIC GEOGRAPHIC INFORMATION SYSTEM						
Module/Course Title **8720202219**		**Student Workload** **2 CU X 16 X 170'=** **90,6618**	**Credits** **2 CU / 3.18 ECTS**	**Semester** 2nd	**Frequency** ONCE YEAR	**Duration** **1 SEMESTER**
1	**Types of courses** LECTURES PRACTICUM		**Contact hours** (2CU X 1,59 ECTS) X{(50:170')X 28,51 Workhours= 26,64	**Independent Study** (2CU X 1,59 ECTS) X{(60:170')X 28,51 Workhours= 31,96	Structured Study (2CU X 1,59 ECTS) X{(60:170')X 28,51 Workhours= 31,96	**Class size** MAX 120 STUDENT
2	**Prerequisites for participation (if applicable)** -					
3	**Program Learning outcomes**					
	PLO-2 Able to analyze regional characteristics and regionalization (regionalization) in the context of resources and disasters based on the principles and approaches of geography to support sustainable development.					
	PLO-4 Able to apply logical, critical, systematic, and innovative thinking in the fields of geography and geography education					
	PLO-6 Able to make appropriate decisions in the context of solving problems in the field of geography and geography education, based on the results of the analysis of information and data					
	PLO-8 Able to formulate, process, analyze data, and present geosphere information both physical and human aspects by using geospatial technology to geography learning and research					
	PLO-11 Able to demonstrate a responsible attitude towards work in the field of expertise independently					
	Course Learning Outcome (CLO)					
	CLO-2					

	Able to analyze regional characteristics and regionalization (regionalization) in the context of digital resources and disasters based on the principles and approaches of geography to support sustainable development.
	CLO-4 Able to apply logical, critical, systematic, and innovative thinking Geographic Information System in the fields of geography and geography education
	CLO-6 Able to make appropriate decisions in the context of solving problems in the field of geography and geography education, based on the results of the analysis of Geographic Information System and data
	CLO-8 Able to formulate, process, analyze data, and present geosphere information digital both physical and human aspects by using geospatial technology to geography learning and research
	CLO-11 Demonstrate a responsible attitude towards work in the field of in calculations and concepts in the study of Geographic Information System independently
4	**Learning materials** 1. GIS as a database management system (DBMS) 2. Subsystem in GIS 3. Spatial data in GIS 4. Repositioning and digitizing maps 5. Editing and Labeling 6. Layout map
5	**Teaching methods** *Project Base Learning*
6	**Assessment methods** *Portofolio*
7	**This module/course is used in the following study programme/s as well** -
8	**Responsibility for module/course** COMPULSORY/~~ELECTIVE~~*/
9	1. Budiyanto, Eko, 2011, Pengenalan dan Bekerja dengan Arcview, Pustaka Pelajar, Yogjakarta 2. Bolstad, Paul. 2016. GIS Fundamentals : A First Text on Geographic Information Systems. Elder Press White Bear lake. Minnesota 3. Chris Brunsdon and Lex Comber, 2014, An Introduction to R for Spatial Analysis and Mapping, SAGE Publications Ltd 4. ESRI, 2012, ArcGIS 9.2 Manual, ESRI Publiser, New York 5. John C. Rodgers, et all, 2012, Geospatial Online Instruction Model, Review of International Geographycal Education Online Vol. 2 Nomor 1 Spring 2012 6. Lilywati, H dan Budiman, 2007, Data Spasial, Pilihan Cerdas Bangsa Yang Bijak, PT Sarana Komunikasi Utama, Bogor. 7. National Research Council, 2006, Learning to The Think Spatially: GIS as a Support System in The K-12 Curriculum, The National Academies Press, Washington. 8. Zain, Ita Mardiani dan Wiwik Sri Utami. 2020. Sistem Informasi Gografis. Unesa University Press