



UNIVERSITAS PENDIDIKAN INDONESIA

SEMESTER LEARNING PLAN (RPS)

COURSE INFORMATION

Course Name	Course Code	Credits	Workload	Course Group	Semester	Prerequisite Course	Published Date
INTRODUCTION TO GEOGRAPHY INFORMATION SCIENCE	SA112	4	180	Study Program Expertise Development	1		2024-09-30 12:55:05

Prepared by	Reviewed by	Approved by
Dr. Bagja Waluya, S.Pd., M.Pd.	Shafira Himayah, S.Pd., M.Sc.	Dr. Lili Somantri, S.Pd., S.S., M.Si.

COURSE DESCRIPTION AND LEARNING OUTCOME

Course description	Introduction to Geographic Information Science is a study program expertise development course.		
Program Learning Outcome Assigned in the Course	1	Demonstrating scientific, educational, and religious attitudes and behavior that contribute to improving the quality of life in society, the nation, and the state, based on culture, norms, and academic ethics	
	2	Able to master theoretical concepts of geography, apply geospatial technology to solve geosphere problems, and develop models and methods for geosphere problem-solving	
	3	Able to design, develop, produce, utilize, control, and evaluate models of analysis and spatial information theory based on science and technology	
Course Learning Outcome (CPMK)	1	S1 Devout to God Almighty and able to demonstrate religious attitudes and behavior in daily life;	
	2	S2 Upholding humanity in carrying out duties and responsibilities based on religion, morals, and ethics;	
	3	P1 Able to master theoretical concepts of geography, apply geospatial technology to solve geosphere problems, and develop models and methods for geosphere problem-solving.	
	4	KU5 Able to manage self-learning;	
	5	KU7 Able to take responsibility for the achievement of group work results and to carry out supervision and evaluation of tasks assigned to workers under their responsibility;	
	6	KK1 Able to design, develop, produce, utilize, control, and evaluate models of analysis and spatial information theory based on science and technology;	
Sub-CPMK	1	CPMK - 3	Students are able to comprehend the essence, scope, and principles of geography within the discipline of Geographic Information Science.
	2	CPMK - 3	Students are able to comprehend the concepts and approaches of geography within the discipline of Geographic Information Science.
	3	CPMK - 3	Students are able to comprehend the historical development of the discipline and the branches of geography
	4	CPMK - 3	Students are able to comprehend the technologies and tools in geography for analyzing spatial phenomena
	5	CPMK - 3	Students are able to analyze global issues by applying geographical approaches.
	6	CPMK - 3	Students are able to understand the development of Geographic Information Science both globally and within Indonesia.
	7	CPMK - 3	Students are able to understand the characteristics of the Geographic Information Science (SaIG) study program both globally and within Indonesia.
	8	CPMK - 3	Students are able to comprehend the scientific domains of Geographic Information Science, including regional surveying and mapping, cartography, geographic information systems, and remote sensing
	9	CPMK - 3	Students are able to comprehend the approaches, concepts, and analyses within the discipline of Geographic Information Science

	10	CPMK - 3	Students are able to understand the prospects and challenges of Geographic Information Science (SaIG), both in the academic field and in the professional workforce
	11	CPMK - 1	Students are able to comprehend the definition of Geographic Information Science and its position within the broader field of geography
Course Materials	1	The essence, scope, and principles of geography within Geographic Information Science	
	2	The basic concepts and approaches of geography within Geographic Information Science	
	3	The historical development of the discipline and the branches of geography.	
	4	Technologies and tools in geography for analyzing spatial phenomena	
	5	Global issues through geographical approaches	
	6	Development of SaIG in Indonesia and global	
	7	Group of expertise: regional mapping and surveying & cartography	
	8	Group of expertise: geographic information system & remote sensing	
	9	Approaches, concepts, and analyses within the discipline of Geographic Information Science	
	10	Prospects and challenges of Geographic Information Science (SaIG) in both academia and the professional workforce	
	11	Definition of Geographic Information Science (SaIG) and the position of SaIG within the discipline of geography	
Learning outcomes demonstrated at the end of the course *)	At the end of the course, students are expected to demonstrate a comprehensive understanding of the history and development of Geographic Information Science (SaIG), as well as the ability to explain the position and role of SaIG within the discipline of geography. Students are also expected to conduct basic analyses using SaIG approaches and concepts, and to identify opportunities and challenges within this field. As evidence of learning achievement, students will produce a written report reviewing the development of SaIG, deliver a presentation highlighting the position of SaIG in geography, and complete a case analysis task that illustrates SaIG competencies in the context of the professional workforce. These outcomes will serve as indicators of learning achievement and student readiness to pursue advanced courses requiring an in-depth understanding of SaIG..		
Learning strategy		Case Method	
		Team based Project	
	✓	Others	
Learning Stages	The course <i>Introduction to Geographic Information Science (SaIG)</i> is designed to provide students with a strong foundation in understanding the scope, concepts, and applications of SaIG. The learning process begins with an introduction to the basic concepts of SaIG, including its history and development both globally and in Indonesia. Students are then guided to explore the position of SaIG within the context of geography, as well as to understand the approaches, concepts, and analytical methods employed in SaIG. Through discussions, case studies, and practical assignments, students will develop a deeper understanding of the competencies required in this field. The course also includes an analysis of career prospects and the challenges faced in the development of SaIG, enabling students to gain a holistic perspective on the role and contribution of SaIG in the future.		

References	1	Danoedoro, P. (2004). Sains informasi geografis: Dari perolehan dan analisis citra hingga pemetaan dan pemodelan spasial. Jurusan Kartografi dan Penginderaan Jauh Fakultas Geografi, Universitas Gadjah Mada.
	2	Goodchild, M. F. (1999). GIS and transportation: Status and challenges.
	3	Skidmore, A. (Ed.). (2002). Environmental modelling with GIS and remote sensing. Taylor & Francis.

LEARNING PLAN

Week-	Sub-CPMK	Learning Indicator	Course Material	Assessment		Learning Methode		Duration (hou)	References	Access Time
				Assessment method (test/nontest)	Assessment weighting(%)	Synchronous	Asynchronous			
1	Students are able to understand the essence, scope, and principles of geography within Geographic Information Science.	Able to understand the essence, scope, and principles of geography within Geographic Information Science.	The essence, scope, and principles of geography within Geographic Information Science	Participative	5	In-person	Searching for sources relevant to coursework and oral examinations.	4 x 50'	1,2,3	03-09-2024 13:00
2	Students are able to understand the essence, scope, and principles of geography within Geographic Information Science.	Able to understand the essence, scope, and principles of geography within Geographic Information Science	The essence, scope, and principles of geography within Geographic Information Science	Participative	5	In-person	Searching for sources relevant to coursework and oral examinations.	4 x 50'	1,2,3	10-09-2024 13:00
3	Students are able to understand the concepts and approaches of geography within Geographic Information Science	Understanding the basic concepts and geographical approaches within Geographic Information Science	The basic concepts and approaches of geography within Geographic Information Science	Participative	5	In-person	Searching for sources relevant to coursework and oral examinations.	4 x 50'	1,2,3	17-09-2024 13:00
4	Students are able to understand the concepts and approaches of geography within Geographic Information Science	Understanding the basic concepts and geographical approaches within Geographic Information Science	The basic concepts and approaches of geography within Geographic Information Science	Participative	5	In-person	Searching for sources relevant to coursework and oral examinations.	4 x 50'	1,2,3	24-09-2024 13:00
5	Students are able to comprehend the historical development of the discipline and the branches of geography	Comprehending the historical development of the discipline and the branches of geography	The historical development of the discipline and the branches of geography.	Participative	5	In-person	Searching for sources relevant to coursework and oral examinations.	4 x 50'	1,2,3	01-10-2024 13:00

Week-	Sub-CPMK	Learning Indicator	Course Material	Assessment		Learning Methode		Durati on (hou)	Referenc es	Acces s Time
				Assessm ent methode (test/nont est)	Assessme nt weighting(%)	Synchron ous	Asynchronous			
6	Students are able to comprehend the technologies and tools in geography for analyzing spatial phenomena	Understanding the technologies and tools in geography for analyzing spatial phenomena	Technologies and tools in geography for analyzing spatial phenomena	Participative	5	In- perso n	Searching for sources relevant to coursework and oral examinations.	4 x 50'	1,2,3	08-10- 2024 13:00
7	Students are able to analyze global issues by applying geographical approaches	Analyzing global issues by applying geographical approaches	Global issues through geographical approaches	Multi choice	5	In- perso n	Searching for sources relevant to coursework and oral examinations.	4 x 50'	1,2,3	15-10- 2024 01:00
8	Mid-term test (UTS)				15					22-10- 2024 13:00
9	Students are able to understand the development of Geographic Information Science both globally and within Indonesia.	Understanding the development of Geographic Information Science both globally and within Indonesia.	Definition of Geographic Information Science (SaIG) and the position of SaIG within the discipline of geography	Participative	5	Discussion	Searching for sources relevant to coursework and oral examinations.	4 X 45'	1,2,3	29-10- 2024 13:00
10	Students are able to understand the characteristics of the Geographic Information Science (SaIG) study program both globally and within Indonesia.	Understand the characteristics of the Geographic Information Science (SaIG) study program both globally and within Indonesia.	Development of SaIG in Indonesia and global	Participative	5	Discussion	Searching for sources relevant to coursework and oral examinations.	4 X 45'	1,2,3	05-11- 2024 13:00
11	Students are able to comprehend the scientific domains of Geographic Information Science, including	Understaning the scientific domains of Geographic Information Science, including	Group of expertise: regional mapping and surveying & cartography	Participative	5	Discussion	Searching for sources relevant to coursework and	4 X 45'	1,2	12-11- 2024 13:00

	regional surveying and mapping, cartography, geographic information systems, and remote sensing	regional surveying and mapping, cartography, geographic information systems, and remote sensing					oral examinations.			
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Week-	Sub-CPMK	Learning Indicator	Course Material	Assessment		Learning Methode		Duration (hou)	References	Access Time
				Assessment method (test/nontest)	Assessment weighting(%)	Synchronous	Asynchronous			
12	Students are able to comprehend the scientific domains of Geographic Information Science, including regional surveying and mapping, cartography, geographic information systems, and remote sensing	Understanding the scientific domains of Geographic Information Science, including regional surveying and mapping, cartography, geographic information systems, and remote sensing	Group of expertise: geographic information system & remote sensing	Participative	5	Discussion	Searching for sources relevant to coursework and oral examinations.	4 X 45'	1,2	19-11-2024 13:00
13	Students are able to comprehend the scientific domains of Geographic Information Science, including regional surveying and mapping, cartography, geographic information systems, and remote sensing	Understanding the scientific domains of Geographic Information Science, including regional surveying and mapping, cartography, geographic information systems, and remote sensing	Group of expertise: geographic information system & remote sensing	Participative	5	Discussion	Searching for sources relevant to coursework and oral examinations.	4 x 50'	1,2	26-11-2024 13:00
14	Students are able to comprehend the approaches, concepts, and analyses within the discipline of Geographic Information Science	Understanding the approaches, concepts, and analyses within the discipline of Geographic Information Science	Approaches, concepts, and analyses within the discipline of Geographic Information Science	Participative	5	In-person	Individual assignment	4 X 45'	1,2	03-12-2024 13:00

15	Students are able to comprehend the definition of Geographic Information Science and its position within the broader field of geography	Understanding the prospects and challenges for Geographic Information Science in academic and workforce	Prospects and challenges of Geographic Information Science (SaIG) in both academia and the professional workforce	Participative	5	Discussion	Individual assignment	4 X 45'	1,2	10-12-2024 13:00
16	Final test				15					17-12-2024 13:00