MODULE HANDBOOK

OCEANOGRAPHY							
Module/Course		Student	credits	Semester	frequency	Duration	
Titles		Workload s				14 X	
8720202110		2 CU X 16 X 170'=	2	3 [™]	28 C.U	meetings	
		90,6618					
1	Types of	courses	Contact	Independent	Structured	class sizes	
			hours	Study	Study		
	LECTUR	FS	(2CU X 1,59	(2CU X 1,59	(2CU X 1,59	32	
	LEGIGICE		ECTS)	ECTS)	ECTS)	32	
			X{(50:170')	X{(50:170')X	X{(50:170')X		
			" X	28,51	28,51		
			28,51	Workhours=	Workhours=		
			Workhours=	26,64	26,64		
			26,64				
2	Prerequisites for participation (if applicable) No There is						
3	Learning outcomes program						
	PLO 4						
	Able to apply logical, critical, systematic, and innovative thinking in the fields of						
	geography and geography education PLOS 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 Show attitude responsible on jobs in the field his expertise in a manner independent						
	COURSE LEARNING OUTCOME (CLO)						

1. Able to apply logical, critical, systematic, and innovative thinking in the fields of geography and geography education of oceanography 2. 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 of oceanography 3. Able to formulate, process, analyze data, and present geosphere information both physical and human aspects by using geospatial technology to geography learning and research of oceanography: 4. Show attitude responsible on jobs in the field his expertise in a manner independent Subject aims/Content 4 1. Introduction 2. atmosphere and Ocean 3. Current surface And waters in 4. Wave Sea 5. Install recede Fifat Physical Chemistry of Seawater 6. 7. Morphology Base Sea 8. Sediments in the Sea 9. Habitat Zoning in the Sea **10.** Productivity at Sea 11. El Nino and La Nina 5 Teaching methods Project Base Learning, Self Direction Learning, Small Group Discussion 6 Assessment methods Portfolios , paper tests 7 This module/course is used in the following study program /s as well Module: Oceanography 8 Responsibility for modules/courses Oceanography in accordance demands 21st century 9 Other information 1. Anugrah Nontji. 1987. Laut Nusantara. Jakarta: Penerbit Djambatan. 2. Direktorat Bina Sumber Hayati. 1983. Hasil Evaluasi Potensi Sumber Daya Hayati Perikanan Laut di Perairan Indonesia Dan Perairan ZEE Indonesia. 3. Nybakken. 1992. Biologi laut. PT. Gramedia, Jakarta. 4. Ross, D.A. 1970. Introduction to Oceanography. New York: Appleton -Century - Crofts Educational Division. 5. Sahala Hutabarat dan Stewart M.Evans. 1986. Pengantar Oseanografi. Jakarta: Penerbit Universitas Indonesia (UI-Press). 6. Thurman, Harold.V. 1983. Essentials Of Oceanography. Ohio: Charies E. MerrilL Publishing Company.