

MODULE HANDBOOK

OCEANOGRAPHY					
Module/Course Titles	Student Workloads	credits	Semester	frequency	Duration
8720202110	2 CU X 16 X 170'=	2	4TH	28 C.U	14 X meetings
1	Types of courses LECTURES	Contact hours (2CU X 1,59 ECTS) X{(50:170') X 28,51 Workhours= 26,64	Independent Study (2CU X 1,59 ECTS) X{(50:170')X 28,51 Workhours= 26,64	Structured Study (2CU X 1,59 ECTS) X{(50:170')X 28,51 Workhours= 26,64	class sizes 32
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)				

	<ol style="list-style-type: none"> 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
4	<p>Subject aims/Content</p> <ol style="list-style-type: none"> 1. Introduction 2. atmosphere and Ocean 3. Current surface And waters in 4. Wave Sea 5. Install recede 6. Fifat Physical Chemistry of Seawater 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	<p>Teaching methods <i>Project Base Learning, Self Direction Learning, Small Group Discussion</i></p>
6	<p>Assessment methods <i>Portfolios , paper tests</i></p>
7	<p>This module/course is used in the following study program /s as well Module: Oceanography</p>
8	<p>Responsibility for modules/courses Oceanography in accordance demands 21st century</p>
9	<p>Other information</p> <ol style="list-style-type: none"> 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.