



MODULE HANDBOOK

Oceanography

Tjong Giok Pin, S.Si., M.Si.

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

Oceanography

Module designation	Oceanography
Semester(s) in which the module is taught	Fifth (5th) Semester
Person responsible for the module	Tjiong Giok Pin, S.Si., M.Si.
Lecturer	1. Tjiong Giok Pin, S.Si., M.Si. 2. Nurul Sri Rahatiningtyas, S.Si., M.Si. 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: $340 \times 14 \times 1 = 4760$ 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. Hydrogeography
Module objectives/intended learning outcomes	After completing this course, students are able to understand the characteristics and characteristics of the ocean chemistry and related to climate patterns, the distribution of marine biota, coastal forms, and applications in the field of maritime, and are able to present systematically in writing both in writing and verbally
Content	1. Introduction to Oceanography 2. The Concept of Oceanographic Science 3. The Physical Characteristic of the Sea (Sea Geology, Coastline, Coastal Morphology Formed, Coral Reef Formed, Seabed Morphology Formed) 4. Bathymetry (Bathymetry Mapping, Ocean Currents, Sea Water Tidal) 5. Chemical Characteristics Sea Water (Ocean Chemical Composition) 6. Salinity (Seawater Salinity and Salinity at the Mouth of the River and Estuary) 7. Oxygen Levels 8. Seabed Morphology Formed 9. Bathymetry 10. Modeling in Geography Information Systems 11. Application in Geography Information Systems
Examination forms	-
Study and examination requirements	1. Quiz (10%) 2. Individual Score (35%) 3. Group Score (20%) 4. Mid Examination (15%) 5. Final Examination (20%)

Reading list	<p>Grant Gross, M. (1977). "Oceanography a view of the earth". Prentice-Hall, Inc.</p> <p>Dadang K. M., Soenaryo, M. Ali, (1982). "Pendahuluan Oseanografi", Diktat kuliah Jur. Geofisika dan Meteorologi, ITB.</p> <p>S. Hutabaratdan S. M. Evans. (1985). "Pengantar Oseanografi". Universitas Indonesia,</p> <p>Nontji, A. (1993). "Laut Nusantara". Djambatan,</p> <p>A. Supangat dan Susanna. (2003). "Pengantar Oseanografi". PS. Oseanografi, Dept, GM, ITB</p> <p>J, J, Bhatt, D. Van N. Company, 1978. "Oceanography". Mc Graw Hill.</p>
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