

Module designation	Oceanography
Module level, if applicable	Undergraduate
Code, if applicable	PIPAUM6608
Subtitle, if applicable	-
Courses, if applicable	-
Semester(s) in which the module is taught	Even/Autumn Term
Person responsible for the module	Indra Fardhani, S.Pd., M.I.L., M.Sc., Ph.D.
Lecturer	Indra Fardhani, S.Pd., M.I.L., M.Sc., Ph.D.
Language	Bahasa Indonesia
Relation to curriculum	1. Undergraduate degree program, elective, 6 <sup>th</sup> semester. 2. Undergraduate degree <i>Merdeka Belajar</i> (freedom to learn) program, elective, 6 <sup>th</sup> semester
Type of teaching, contact hours	Lecture/instructional and discussion, guided inquiry, 100 minutes per lecture per week
Workload	1. Lectures: 2 x 50 = 100 minutes (1,67 hours) per week 2. Exercise and Assignments: 2 x 60 minutes = 120 minutes (2 hours) per week 3. Independent Study: 2 x 60 minutes = 120 minutes (2 hours) per week
Credit points	2 credit points (~3.17 ECTS-eq).
Requirements according to the examination regulations	A student must have attended at least 75% of the lectures to sit in the exams.
Recommended prerequisites	-
Module objectives/intended learning outcomes	After completing this module, students are expected to: LO 1: master basic biology knowledge using the Nature of Science (NOS) along with logical, critical, systematical, and innovative thinking in team collaboration using local potential and information technology development. LO 2: master basic physics knowledge and earth science using the Nature of Science (NOS) along with

	<p>logical, critical, systematical, and innovative thinking in team collaboration using local potential and information technology development.</p> <p>LO 3: master basic chemistry knowledge using the Nature of Science (NOS) along with logical, critical, systematical, and innovative thinking in team collaboration using local potential and information technology development.</p>
Content	<ol style="list-style-type: none"> <li>1. Structure and physico-chemical characteristics of ocean;</li> <li>2. Components of marine biota;</li> <li>3. Coastal and marine natural resources, sustainable management and utilization;</li> <li>4. Thermohaline current, global conveyor belt</li> <li>5. Pollution of aquatic and fishery biota;</li> <li>6. Natural phenomenon at the sea (Tsunami, hurricane), tsunami early warning system</li> </ol>
Study and examination requirements and forms of examination	Presentation, Discussion Report, Middle Semester Exam, and Semester Exam
Media employed	LCD, blackboard, moocs websites, UM e-learning system (Sipejar)
Reading list	<ol style="list-style-type: none"> <li>1. Anderson, R.N., 1986. Marine Geology. John Willey &amp; Sons, New York.</li> <li>2. De Klerk, L.G., 1982. Sea Level, Reef and Coastal Plain of South West Sulawesi Indonesia. Utrecth Netherland.</li> <li>3. Duxbury, A.C., 1984. An Introduction to The World's Ocean. Publishing Company, California.</li> <li>4. Emiliani, C., 1981. The Sea, The Oceanic Lithosphere. John Wiley &amp; Sons, New York.</li> <li>5. Meadows, P.S. and Campbell, J.I., 1988. An Introduce to Marine Science. John Wiley &amp; Sons Inc, New York.</li> <li>6. Kennett, J., 1990. Marine Geology. Prentice-Hall, Englewood Cliffs.</li> <li>7. Shepard, F.F., 1973. Submarine Geology, 3rd Ed. Harper and Row Publishers, New York.</li> <li>8. Faure, G., 1986. Principles of Isotope Geology, Second Ed. John Wiley &amp; Sons, USA</li> <li>9. Webb, P. 2019. Introduction to Oceanography.</li> </ol>
Date of last amendment made	May, 2020