

MODUL

**MANAGEMENT OF COASTAL
AND MARINE AREAS**



**MASTER PROGRAM OF ENVIRONMENTAL SCIENCE
SCHOOL OF POSTGRADUATED STUDIES
DIPONEGORO UNIVERSITY**

Modul Description :

Modul design	Management of Coastal and Marine Areas
Modul level, if applicable	
Code, if applicable	P-CIL-8-212
Subtitles, if any	
Course, if applicable	
Semester(s) in which the Modul is taught	Semester 2
Modul responsible*	
Teaching Lecturer	1. Dr. Ir. Sutrisno Anggoro, MS 2. Dr. Muhammad Helmi, S.Si, M.Si
Language	<i>Indonesian and English</i>
Relationship with curriculum	
Type of teaching, hours of contact	<i>Studying: 1 x 120 minutes x 16 meetings = 32 hours/week Q&A: 1 x 20 minutes 16 meetings = 5.3 hours/week Discussion: 1 x 20 minutes 16 meetings = 5.3 hours/week Presentation: 1 x 20 minutes 16 meetings = 5.3 hours/week Individual assignments: 36 minutes/day = 3 hours/week Total work for 1 semester = 100 hours = 4 ECTS</i>
Workload	<i>(Estimated) workload, divided into contact hours (lectures, exercises, laboratory sessions, etc.) and personal study, including test preparation, specified in hours,¹ and overall.</i>
credit points	<i>2 credits / 4 ECTS</i>
Requirements according to the exam regulations	<i>Lecture attendance of at least 75%</i>
Recommended prerequisites	<i>For example, competence in...</i>

*Advanced lecture material conducted by the main supervisor, co-supervisors and students refers to the research topic.

Modulthe desired learning objectives/outcomes	Students are able to explain concepts and definitions of management, utilization and development of coastal and marine areas in an integrated and sustainable manner. Students know zoning for the management of coastal and marine areas, are able to explain the concept of rights to control coastal waters and small islands and students are able to analyze sediment transport in coastal waters and small islands
Fill	This course aims to be able to explain the physical conditions of coastal waters and small islands geomatically, identify the development of coastal waters and small islands as strategic areas. explain the legal basis, principles, and issues of developing coastal and marine areas
Study and exam requirements and forms	<ul style="list-style-type: none"> • <i>Open the book and close the book</i> • <i>Multiple choice, case studies, interviews, practicals</i>
Media used	<i>Powerpoint, youtube, website</i>
Reference	<ol style="list-style-type: none"> 1. Ahlhorn. F. 2018. Integrated Coastal Area Management. Status, Challenges and Prospects. Spinger 2. Green, DR and Payne, JL 2017. Principles and Practice of Marine and Coastal Resource Management. United States of America: 3. Krishnamurthy, RR et al. 2018. Coastal Management: Global Challenges and Innovation First Edition. Academic Press



SEMESTER STUDY PLAN

Study program: Master of Environmental Science

Faculty: School of Postgraduated Studies

Subject:		Coastal Area Management	Code: P-CIL-8-220	Credit:2 (4 ECTS)	Smt:2	
Supporting lecturer:		1. Prof. Dr. Ir. Sutrisno Anggoro, MS 2. Dr. Muhammad Helmi, S.Si, M.Si				
Learning Outcomes		<ul style="list-style-type: none"> • Students are able to explain the concepts and definitions of management, utilization, and development of coastal and marine areas in an integrated and sustainable manner. • Students know the zoning for the management of coastal and marine areas. • Students are able to explain the concept of the right to control coastal waters and small islands. • Students are able to analyze sediment transport in coastal waters and small islands 				
Subject:						
Short Description of Courses:		This course aims to be able to explain the physical condition of coastal waters and small islands geomatically, to identify the development of coastal waters and small islands as strategic areas. explain the legal basis, principles, and problems of developing coastal and marine areas				
1	2	3	4	5	6	7
Week	Final Ability of each learning stage	Study Materials/ Subjects	Learning methods	Workload	Student Learning Experience	Evaluation
						Criteria & Indicators
1	Introduction/ Contract study	Introduction/ Lecture contract	Lecture, ask answer, and discuss	216 minutes (0.25 ECTS) Consist of: <i>Lecture =</i>	Read recommended Modules and libraries; Discussion	2.5

				<i>1x 120 minutes</i> <i>Q&A = 1 x 20 minutes</i> <i>Discussion = 2 x 20 minutes</i> <i>Individual Tasks (Self Work) = 1 x 36 minutes/day (16 weeks)</i>	of learning outcomes		
2	Students are able to explain the legal basis, principles and objectives of the management of national coastal and marine areas	Introduction to Coastal and Marine Area Management	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: <i>Lecture = 1x 120 minutes</i> <i>Q&A = 1 x 20 minutes</i> <i>Discussion = 1 x 20 minutes</i> <i>Presentation = 1 x 20 minutes</i> <i>Individual Tasks (Self Work) = 1 x 36 minutes/day (16 weeks)</i>	Read recommended Modules and libraries; Discussion of learning outcomes; Presentation of the results of the discussion	Criteria: Accuracy and mastery of theory Non-test form: student activity and assignment presentation	2.5
3	Students are able to explain the legal basis, principles and objectives of international coastal and marine area management	Introduction to Coastal and Marine Area Management	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: <i>Lecture = 1x 120 minutes</i> <i>Q&A = 1 x 20 minutes</i> <i>Discussion = 1 x 20 minutes</i> <i>Presentation = 1 x 20 minutes</i> <i>Individual Tasks (Self Work) = 1 x 36 minutes/day (16 weeks)</i>	Read recommended Modules and libraries; Discussion of learning outcomes; Presentation of the results of the discussion	Criteria: Accuracy and mastery of theory Non-test form: student activity and assignment presentation	2.5
4	Able to explain the basic concepts of	Basic Concepts of Coastal and	Lectures, questions and	216 minutes (0.25 ECTS)	a. Previous week's PR discussion	Accuracy and Completeness and	5

	coastal and marine area management	Marine Area Management Process	answers, and discussions	Consist of: Lecture = 1x 120 minutes Q&A = 1 x 20 minutes Discussion = 1 x 20 minutes Presentation = 1 x 20 minutes Individual Tasks (Independent Work) = 1 x 36 minutes/day (16 weeks)	b. Students listen to the lecturer's explanation and answer the lecturer's questions, as well as discuss	correctness of explanation and accuracy of understanding	
5	Able to explain the concept of coastal and marine area management process	Basic Concepts of Coastal and Marine Area Management Process	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: Lecture = 1x 120 minutes Q&A = 1 x 20 minutes Discussion = 1 x 20 minutes Presentation = 1 x 20 minutes Individual Tasks (Independent Work) = 1 x 36 minutes/day (16 weeks)	a. Previous week's PR discussion b. Students listen to the lecturer's explanation and answer the lecturer's questions, as well as discuss	Accuracy and Completeness and correctness of explanation and accuracy of understanding	5
6	Able to explain zoning for coastal and marine area management	Zoning for Coastal and Marine Area Management	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: Lecture = 1x 120 minutes Q&A = 1 x 20 minutes Discussion = 1 x 20 minutes Presentation = 1 x 20 minutes Individual Tasks (Self	a. Students listen to the lecturer's explanation and answer the lecturer's questions, as well as discuss b. Discussion of the results of the previous week's group assignments	Completeness and correctness of explanation and accuracy of understanding	15

				<i>Work) = 1 x 36 minutes/day (16 weeks)</i>			
7	Able to explain zoning for coastal and marine area management part 2	Zoning for Coastal and Marine Area Management	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: <i>Lecture = 1x 120 minutes</i> <i>Q&A = 1 x 20 minutes</i> <i>Discussion = 1 x 20 minutes</i> <i>Presentation = 1 x 20 minutes</i> <i>Individual Tasks (Self Work) = 1 x 36 minutes/day (16 weeks)</i>	a. Students listen to the lecturer's explanation and answer the lecturer's questions, as well as discuss b. Discussion of the results of the previous week's group assignments	Completeness and correctness of explanation and accuracy of understanding	15
8	Able to explain development policies for coastal and ocean areas	Coastal and Marine Area Development Policy	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: <i>Lecture = 1x 120 minutes</i> <i>Q&A = 1 x 20 minutes</i> <i>Discussion = 1 x 20 minutes</i> <i>Presentation = 1 x 20 minutes</i> <i>Individual Tasks (Self Work) = 1 x 36 minutes/day (16 weeks)</i>	Students listen to the lecturer's explanation and answer the lecturer's questions, as well as discuss	Completeness and correctness of explanation and accuracy of understanding	15
9	Able to explain development policy for coastal and ocean areas part 2	Coastal and Marine Area Development Policy	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: <i>Lecture = 1x 120 minutes</i> <i>Q&A = 1 x 20 minutes</i> <i>Discussion = 1 x 20</i>	Students listen to the lecturer's explanation and answer the lecturer's questions, as well as discuss	Completeness and correctness of explanation and accuracy of understanding	15

				<i>minutes</i> <i>Presentation = 1 x 20 minutes</i> <i>Individual Tasks (Self Work) = 1 x 36 minutes/day (16 weeks)</i>			
10	Mid Term Examination (UTS)	Meeting Material 1- 9	Written test	216 minutes of processing time or the equivalent of 0.25 ECTS	Students working on UTS questions	Completeness and correctness of explanation and accuracy of understanding	5
11	Able to explain the potential and problems of coastal and ocean development	Potential and Problems of Coastal and Marine Area Development	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: <i>Lecture = 1x 120 minutes</i> <i>Q&A = 1 x 20 minutes</i> <i>Discussion = 1 x 20 minutes</i> <i>Presentation = 1 x 20 minutes</i> <i>Individual Tasks (Self Work) = 1 x 36 minutes/day (16 weeks)</i>	a. Students listen to the lecturer's explanation and answer the lecturer's questions, as well as discuss b. Discussion of the results of the previous week's group assignments (influence diagram)	Completeness and correctness of explanation and accuracy of understanding	15
12	Students are able to explain the use and arrangement of small islands and the surrounding waters	Utilization and Arrangement of Small Islands and Surrounding Waters	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: <i>Lecture = 1x 120 minutes</i> <i>Q&A = 1 x 20 minutes</i> <i>Discussion = 1 x 20 minutes</i> <i>Presentation = 1 x 20 minutes</i> <i>Individual Tasks</i>	a. Students listen to the lecturer's explanation and answer the lecturer's questions, as well as discuss b. Discussion of the results of the	Completeness and correctness of explanation and accuracy of understanding	15

				<i>(Independent Work) = 1 x 36 minutes/day (16 weeks)</i>	previous week's group assignments		
13	Able to explain the physical condition of coastal waters and small islands in terms of geomatics	Physical Condition of Coastal Waters and Small Islands Seen from the Geomatics Aspect	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: <i>Lecture = 1x 120 minutes</i> <i>Q&A = 1 x 20 minutes</i> <i>Discussion = 1 x 20 minutes</i> <i>Presentation = 1 x 20 minutes</i> <i>Individual Tasks (Self Work) = 1 x 36 minutes/day (16 weeks)</i>	a. Students listen to the lecturer's explanation and answer the lecturer's questions, as well as discuss b. Discussion of the results of the previous week's group assignments	Completeness and correctness of explanation and accuracy of understanding	15
14	Able to explain the process of sediment transport in coastal waters and small islands.	Sediment Transport Process in Coastal Waters and Small Islands	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: <i>Lecture = 1x 120 minutes</i> <i>Q&A = 1 x 20 minutes</i> <i>Discussion = 1 x 20 minutes</i> <i>Presentation = 1 x 20 minutes</i> <i>Individual Tasks (Self Work) = 1 x 36 minutes/day (16 weeks)</i>	a. Students listen to the lecturer's explanation and answer the lecturer's questions, as well as discuss b. Discussion of the results of the previous week's group assignments	Completeness and correctness of explanation and accuracy of understanding	15
15	Able to identify the development of coastal waters and small islands as strategic areas	Identification of the development of coastal waters and small islands as strategic areas	Lectures, questions and answers, and discussions	216 minutes (0.25 ECTS) Consist of: <i>Lecture = 1x 120 minutes</i> <i>Q&A = 1 x 20 minutes</i>	a. Students listen to the lecturer's explanation and answer the	Completeness and correctness of explanation and accuracy of understanding	15

				<p><i>Discussion = 1 x 20 minutes</i></p> <p><i>Presentation = 1 x 20 minutes</i></p> <p><i>Individual Tasks (Self Work) = 1 x 36 minutes/day (16 weeks)</i></p>	lecturer's questions, as well as discuss b. Discussion of the results of the previous week's group assignments		
16	Final Examination (UAS)	Meeting Materials 1-15 (resume material)	Written test	216 minutes of processing time or the equivalent of 0.25 ECTS	Students working on UAS questions	Completeness and correctness of explanation and accuracy of understanding	15
8. Reference List:		<ol style="list-style-type: none"> 1. Ahlhorn. F. 2018. Integrated Coastal Area Management. Status, Challenges and Prospects. Springer 2. Green, DR and Payne, JL 2017. Principles and Practice of Marine and Coastal Resource Management. United States of America: 3. Krishnamurthy, RR et al. 2018. Coastal Management: Global Challenges and Innovation First Edition. Academic Press 					

