

Module designation	The Natural Resources and Environmental Economics course is an elective course in the Doctoral Study Program in Geography. This subject is taken by students after taking mandatory courses and is adjusted to the dissertation theme chosen by the student. The subject of Natural Resources and Environmental Economics discusses the basic concepts of economic activities and the use of natural resources and their impact on the environment on the basis of economic-ecological studies, by examining the use of natural resources as a factor of production and various problems as a result of economic activity and economic development conflicts, various studies of development economic policies in maintaining natural ecosystems to realize <i>sustainable development</i> and the implications of Indonesia's economic policies on fair utilization.		
Semester(s) in which the module is taught	Odd/Even		
Person responsible for the module	Dr. Rika Harini, S.Si, M.P Dr. Sudrajat, S.Si, M.P		
Language	Indonesian		
Relation to curriculum	Elective		
Teaching methods	SCL: Team-based Project/Case-based Learning/PBL		
Workload (incl. contact hours, self-study hours)	CLO1	Interactive discussions in class	3 meetings 6 x 50 minutes of classroom lectures and discussions
	CLO2	Interactive discussions in class and assignments	2 meetings 4 x 50 minutes of classroom lectures and discussions 2 x 60 minutes of self-paced tasks
	CLO3	Interaction discussions in class and assignments	2 meetings 4 x 50 minutes of classroom lectures and discussions 2 x 60 minutes of self-paced tasks
	CLO4	Interaction discussions in class and assignments	3 meetings 6 x 50 minutes of classroom lectures and discussions 2 x 60 minutes of independent assignment (literature study and evaluation of literature study results in writing)
	CLO5	Interaction discussions in class and assignments	4 meetings 8 x 50 minutes of classroom lectures and discussions 3 x 60 minutes of self-assignment (case study and evaluation of results in writing and presentation)

Credit points	Assessment Techniques	Percentage of Assessment (%)	Criteria/ Indicators	CLO (%)				
				1	2	3	4	5
	Participatory Activities	10	Contribution of class discussion activities in each subject matter of the lecture		10			10
	Project Results/ Case Study Results/ PBL Results	50	Natural Resource Problem Analysis Economic review Case study and PBL assessment rubric		10		40	50
	Cognitive							
	Assignment	20	Task command conformance and task results Task rubric		10		10	20
	Final Exam	20	Answer key Final Exam assessment rubric		10		10	20
	Total	100						
Required and recommended prerequisites for joining the module	Taken after taking compulsory courses and adapted to the theme of the dissertation							
Module objectives/intended learning outcomes	ELO2	Supporting Competence, I (knowledge and <i>understanding of</i>) is being able to understand, synthesis, and or evaluate the development of concepts, theories and applications of geography for the benefit of development.						
	ELO4	Supporting Competence III (practical skill-able to) is being able to develop, modify, and synthesis geographic analysis methods to solve problems in the real world, whether spatial, ecological, or regionally complex.						
	CLO1	Understand and explain the conceptual approach to the theory of E of Natural Resources and Climate (ELO2)						
	CLO2	Understand, explain and analyze the characteristics and distribution of natural resources on earth (ELO 2)						
	CLO3	Understand, explain and analyze human activities towards natural resources and the environment(ELO 2)						
	CLO4	Analyze and evaluate socioeconomic factors against natural resources and the environment (ELO 4)						

	CLO5	develop economic and environmental theory towards <i>a green economy</i> (ELO 4)
Content	CLO1	1. Concept and Theory of Natural Resources and the Environment 2. Economic Concepts and Theories 3. Geography Approach in the study of natural resources and the environment
	CLO2	1. Dimensions of natural resource analysis 2. The value of biotic and abiotic resources
	CLO3	1. Population activity on various landforms 2. Degradation of land, water and air resources
	CLO4	1. Economic potential of natural resources and the environment 2. Costs and Benefits of natural resources and the environment
	CLO5	1. Economic Valuation of Natural Resources and Environment 2. Willingness To Pay Natural Resources and Environment 3. Total Economic Value
Examination forms	Final Exam	
Study and Examination Requirements	Must attend lecture for more than 70%.	
Reading list	Main References: 1. Meynard M, Huf Scerman, Eric Alyn, 1984. Economic approach to Natural and Environmental Quality 2. Kery Turner, David Pearce, 1994 .Environmental Economic, New York. 3. Ahmad Fauzi, 2008. Ekonomi Sumberdaya alam dan Lingkungan (Teori dan aplikasi), IPB, Bogor. 4. Tom Teitenberg and Lyyne Lewis , 2018. Environmental & Natural Resource Economics, 2018 , Routledge 5. Erhun Kula, 1994. Economics of Natural Resources, the Environment and Policies, London Chapman & Hall 6. George Halko, 2023. Current Issues in Natural Resource and Environment Economic. Switzerland 7. Scott J. Callan dan J.M. Thomas, 2000. <i>Environmental Economics and Management: Theory, Policy, and Applications</i>. Tokyo: The Dryden Press.	

	Additional References: 8. Sohansson, P.O, 1972 Environmental Policy Pollution-Economic Aspect, Washington, D.C. Resources For The Future, Inc 9. Francisco, Herminia, Glover, David, 1999, Economy & environment : case studies in Vietnam, Singapore IDRC 10. Reksohadiprodjo, Sukanto. 2000. Ekonomi Lingkungan (Suatu Pengantar). BPFE, Yogyakarta. 11. Suparmoko, 1997, Ekonomi Sumberdaya Alam dan Lingkungan, BPFE, Yogyakarta 12. Collier, William, L. "Review of Environmental Management In Indonesia" <i>Working Paper</i>, No 2, ADB and GOI, 1997 13. Undang – Undang No 23, tahun 1997 tentang Pengelolaan Lingkungan Hidup. 14. Rika Harini, 2021, Valuasi Ekonomi Kawasan Geopark Karangsambung-Karang Bolong, Gama Press 15. Purba, B., Rahmadana, M. F., Basmar, E., Sari, D. P., Klara, A., Damanik, D., Faried, A. I., Lie, D., Fazira, N., & Rozaini, N. (2021). <i>Ekonomi Pembangunan</i>. Medan: Yayasan Kita Menulis 16. IPCC. (2006). <i>IPCC Guidelines For National Greenhouse Gas Inventories</i>. Intergovernmental Panel on Climate Change.
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