



**USK**  
UNIVERSITAS  
SYIAH KUALA

**FACULTY OF AGRICULTURE**  
**DEPARTMENT OF SOIL SCIENCE**

**UNDERGRADUATE PROGRAM**

**MODULE HANDBOOK**

Module designation	Natural Resources and Environmental Economics (SSOL6009)
Semester(s) in which the module is taught	5 <sup>th</sup> Semester
Person responsible for the module	Dr. Ir. Indra, MP
Language	Indonesian, English
Relation to curriculum	Elective module for Soil Science Department
Teaching methods	Lecture, small group discussion, interactive discussion
Workload (incl. contact hours, self-study hours)	<ul style="list-style-type: none"><li>✓ 100 minutes lecture and discussion per week</li><li>✓ 120 minutes structured tasks per week</li><li>✓ 120 minutes learn to be independent per week</li></ul>
Credit points	2 SKS = 3.2 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<ul style="list-style-type: none"><li>✓ Students are able to assess the scarcity of natural resources and analyze the costs, benefits, and social costs associated with the use of natural and environmental resources.</li><li>✓ Students are able to apply natural resource accounting for sustainable development.</li></ul>
Content	This course aims to provide the conceptual and theoretical understanding of economics and natural resources and the environment (land, forest, water and soil resources) and climate change economics (global warming).
Exams and assessment formats	Assignment, quiz, case study, oral presentation, midterm exam, final exam
Study and examination requirements	<ul style="list-style-type: none"><li>✓ Case analysis: 55%</li><li>✓ Participative activity: 5%</li><li>✓ Quiz: 5%</li><li>✓ Assignment: 5%</li><li>✓ Midterm exam: 15%</li><li>✓ Final exam: 15%</li></ul>

Reading list	<ol style="list-style-type: none"><li>1. Agus Priyono. (2018). Rawa Tarung: Pertaruhan di Rawa Gambut Tripa.</li><li>2. Ahmad, F., Draz, M. U., Chandio, A. A., Ahmad, M., Su, L., Shahzad, F., &amp; Jia, M. (2022). Natural resources and environmental quality: Exploring the regional variations among Chinese provinces with a novel approach. <i>Resources Policy</i>, 77, 102745. <a href="https://doi.org/10.1016/j.resourpol.2022.102745">https://doi.org/10.1016/j.resourpol.2022.102745</a></li><li>3. Lewis, L., &amp; Tietenberg, T. (2019). <i>Environmental economics and policy</i>. Routledge.</li><li>4. Palansooriya, K. N., Sang, M. K., Igalavithana, A. D., Zhang, M., Hou, D., Oleszczuk, P., Sung, J., &amp; Ok, Y. S. (2022). Biochar alters chemical and microbial properties of microplastic-contaminated soil. <i>Environmental Research</i>, 209, 112807.</li></ol>
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