



## Course Module

# Economics and Finance of Forest Resources

Faculty of Forestry

Mulawarman University

Module name	Economics and Finance of Forest Resources
Modul level, if applicable	Graduates Programme
Code, if applicable	190401802W009
Subtitle, if applicable	
Courses, if applicable	Regular
Semester(s) in which the module is taught	I (one)
Person responsible for the module	Prof. Dr. Ir. Rujehan, MP
Lecturer	Prof. Dr. Ir. Rujehan, MP Dr. Bernaulus Saragih, M.Sc.
Language	Indonesia
Relation to curriculum	Programme, mandatory
Type of teaching, contact hours	Lecture, 3 lecture contact hours
Workload	Number of meetings per semester: 16 meetings (14 meetings for learning activity, 1 meeting for mid semester, 1 meeting for final examination) 3 x 50 minutes lectures, 3 x 60 minutes structure activity, 3 x 60 minutes individual activity, with a total of 7,140 minutes or equivalent to a total of 119 hours in 14 weeks per semester
Credit points	3 SKS (4.8 ECTS) Details: 1 Credit = 170 min/week 1 Credit = 170 min x 14 week = 2,380 min/semester 1 ECTS = 25 h / semester 1 Credit = 2,380 / 60 / 25 = 1.59 = 1.6 ECTS 3 Credit = 1.6 x 3 = 4.8 ECTS
Requirements according to the examination regulations	Have attended not less than 80% class meetings
Recommended prerequisites	
Module objectives/intended learning outcomes	<p><b><u>Intended Learning Outcomes</u></b></p> <p><b><u>Knowledge and Understanding</u></b></p> <p><b>ILO-1</b> : Applying scientific ethics, norms, and values of professionalism</p> <p><b><u>Engineering Analysis</u></b></p>

	<p><b>ILO-2</b> : Mastering specialized knowledge, skills and techniques in the field of forestry and tropical environment and being able to develop innovative theories, models and methods in their field.</p> <p><b><u>Investigation</u></b></p> <p><b>ILO-3</b> : Able to analyze current problems and issues, and assess the ecological, social, and economic impacts of implementing programs in the forestry and tropical environmental sectors.</p> <p><b><u>Social Competences</u></b></p> <p><b>ILO-5</b> : Lead, work in a team, and be responsible for achieving group work results.</p> <p><b><u>Course Learning Outcomes</u></b></p> <p><b><u>Knowledge and Understanding</u></b></p> <p><b>CLO-1</b> : Students are able to understand the Basics of Ethics and Professionalism in Forest Resource Economics</p> <p><b><u>Engineering Analysis</u></b></p> <p><b>CLO-2</b> : Students are able to master the Theory and Techniques of Forestry Economic Analysis</p> <p><b><u>Investigation</u></b></p> <p><b>CLO-3</b> : Students are able to analyze Economic and Financial Problems and Their Impacts</p> <p><b><u>Social Competences</u></b></p> <p><b>CLO-4</b> : Students are able to collaborate and Lead in Forest Resource Economic Management</p>
Content	<p>The forest resource economics and finance course is a compulsory course for postgraduate students of forestry science with a weight of 3 credits (2-1). In this course, students are able to explain the concept of forestry economic theory along with its models, explain and analyze the time value of money of a project/activity, explain and the factors that influence wood production and demand, then analyze the growth of a stand, are able to analyze the financial feasibility of a stand and explain and evaluate the total economic value of SDH. Learning activities are carried out through class meetings and practicums. Assessments are based on student activity in lectures, direct questions and answers in class, discipline, mid-term and final exams, and assignments.</p> <p>After attending this course, students have the ability to:</p> <ol style="list-style-type: none"> <li>1. explain the concept of forestry economic theory and its models (CLO-1)</li> <li>2. explain and analyze the time value of money of a project/activity (CLO-1)</li> </ol>

	<div>3. explain and factors that influence wood production and demand then Analyze the growth of a stand <b>(CLO-2)</b></div> <div>4. analyze the financial feasibility of a stand <b>(CLO-2)</b></div> <div>5. explain and evaluate the total economic value of SDH <b>(CLO-3)</b></div> <div>6. analyze and evaluate several global issues <b>(CLO-4)</b></div>																																
Study and examination requirements and forms of examination	<div>Evaluation and assessment of the learning process are following scheme 5 in the Academic Regulations of Mulawarman University:</div> <table><tr><th>No.</th><th>Objects of Assessment</th><th>Forms of Assessment</th><th>Quantity (%)</th></tr><tr><td>1</td><td>Affective</td><td>Participation</td><td>10</td></tr><tr><td>2</td><td>Laboratory Practice/Fieldwork</td><td>Participation, Group Project Report</td><td>20</td></tr><tr><td>3</td><td>Assignment/Case study</td><td>Group presentation</td><td>15</td></tr><tr><td>4</td><td>Project</td><td>Report</td><td>15</td></tr><tr><td>5</td><td>Mid-semester test</td><td>Written test</td><td>15</td></tr><tr><td>6</td><td>Final semester test</td><td>Written test</td><td>25</td></tr><tr><td colspan="3">TOTAL</td><td>100</td></tr></table>	No.	Objects of Assessment	Forms of Assessment	Quantity (%)	1	Affective	Participation	10	2	Laboratory Practice/Fieldwork	Participation, Group Project Report	20	3	Assignment/Case study	Group presentation	15	4	Project	Report	15	5	Mid-semester test	Written test	15	6	Final semester test	Written test	25	TOTAL			100
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Media employed	Class, MS. Powerpoint, Ms.Word, Laptop, LCD																																
Reading list	<div>1. Lahjie AM. 2016. Teknik Agroforestri. Samarinda: Mulawarman University Press.</div> <div>2. Lahjie AM, Lepong A, Simarangkir BDAS, Kristiningrum R, Ruslim Y. 2018. Community forest management: Comparison of simulated production and financial returns from agarwood, tengkawang and rubber trees in West Kutai, Indonesia. Biodiversitas 19(2).</div> <div>3. Lisna A, Lahjie AM, Simarangkir BDAS, Yusuf S, Ruslim Y. 2017. Agroforestry System Biodiversity of Arabica Coffe Cultivation in North Toraja District, South Sulawesi, Indonesia. Biodiversitas 18(2).</div> <div>4. Winarni B, Lahjie AM, Simarangkir BDAS, Yusuf S, Ruslim Y. 2017. Tengkawang cultivation model in community forest using agroforestry systems in West Kalimantan, Indonesia. Biodiversitas 18 (2).</div> <div>5. Musmuliadi, Lahjie AM, Simarangkir BDAS, Yusuf S, Ruslim Y. 2017. Bioeconomic and Enviromental Valuation Of Dipterocarp Estate Forest Based on Local Wisdom in Kutai Kartanegara, Indonesia. Biodiversitas.</div> <div>6. Sukirno S. 2013. Pengantar Ekonomi Mikro. Edisi Keempat: Jakarta: Raja Grafindo</div> <div>7. Husnah, S dan Suwarsono. 1999. Studi Kelayakan Proyek. UPP AMP YKPN. Yogvakarta</div>																																

	<ol style="list-style-type: none"> <li>8. Van Gardingen PR, McLeish MJ, Philips PD, Fadilah D, Tyrie G, Yasman I. 2003. Financial and ecological analysis of management options for logged-over dipterocarp forest in Indonesia Borneo. <i>For Ecol Manag</i> 183: 1-29.</li> <li>9. Dingga E. 2014. On a possible predictor of the cyclical position of the economy. <i>Procedia Econ Financ</i> 8, 254-261.</li> <li>10. Pearce DW and Moran D. 1994. The economic value of biodiversity. Earth scan, London</li> <li>11. Saragih, B. 2011. Economic value of non-timber forest products among Paser Indigenous People of East Kalimantan. Belanda: University of Leiden</li> <li>12. Kristiningrum R, Lahjie A, Masjaya, Yusuf S., Ruslim Y. 2019. Species diversity, stand productivity, aboveground biomass and economic value of mangrove ecosystem in Mentawir Village, East Kalimantan, Indonesia. <i>Biodiversitas</i> 20 (10): 2848-2857.[Indonesian].</li> </ol>
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