


## MODULE HANDBOOK

	<b>UNIVERSITAS PADJADJARAN</b> <b>FACULTY OF MATHEMATICS AND NATURAL SCIENCES</b> <b>BACHELOR OF BIOLOGY PROGRAMME</b>	<b>COURSE CODE</b> <b>D10D-6301</b>
<b>Module designation</b>	Landscape Ecology	
<b>Semester(s) in which the module is taught</b>	5	
<b>Person(s) responsible for the module</b>	1. Prof. Parikesit, Ph.D 2. Dr. Keukeu Kaniawati R 3. Nurullia Fitriani, S.Si, MT	
<b>Medium of instruction</b>	Indonesian	
<b>Relation to curriculum</b>	Elective course	
<b>Teaching methods</b>	Lectures, discussions, cooperative learning, and inquiry learning	
<b>Workload</b>	Total workload : 5440 minutes = 90.67 hours  Lectures, discussions, cooperative learning, and inquiry learning : 2 x 50 minutes x 16 weeks = 1600 minutes = 26.67 hours Exercises : 2 x 60 minutes x 16 weeks = 1920 minutes = 32 hours Self-study : 2 x 60 minutes x 16 weeks = 1920 minutes = 32 hours	
<b>Credit points</b>	2,00 (3,62 ECTS)	
<b>Required and recommended prerequisites for joining the module</b>	-	
<b>Module objectives/intended learning outcomes</b>	<ol style="list-style-type: none"> <li>1. Students are able to understand the basic concepts and meaning of landscape ecology</li> <li>2. Students are able to understand the complexity, hierarchy and structure of the landscape</li> <li>3. Students are able to understand various patterns and processes in a landscape</li> <li>4. Students are able to understand the concept of landscape heterogeneity and ecotone</li> <li>5. Students are able to explain the principles of conservation, management and landscape design</li> <li>6. Students are able to explain the concept of urban ecology and the concept of sustainable cities</li> <li>7. Students are able to explain the principles of managing biodiversity in urban areas</li> </ol>	
<b>Contents</b>	The landscape ecology course studies the meaning, history of the development of landscape ecology, landscape patterns and structures, the relationship between landscape and biodiversity, the meaning and concept of landscape ecology in urban areas, the concept of sustainable urban areas and biodiversity conservation in urban areas. After taking this course, students are able to explain principles of managing biodiversity in urban areas.	
<b>Examination forms</b>	Quiz, midterm exam, assignment, and final exam	
<b>Study and examination requirements</b>	The minimum attendance in lectures is 80%. Final grades are evaluated based on Quizzes (25%), Assignments (25%), midterm exam (25%), and final exam (25%).	
<b>Reading lists</b>	<ol style="list-style-type: none"> <li>1. Farina, A. 2006. Principles And Methods In Andscape Ecology. Springer. Netherland</li> <li>2. Elmqvist. T et. al. 2013. Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities. Springer. London</li> <li>3. Amistadi,L., Balducci, V., Bradecki, T dan Schröder, U. 2022. Mapping Urban Spaces: Designing the European City. Routledge. New York</li> <li>4. Niemela J. Ecology and Urban Planning. Biodiversity and Conservation 1999;8 119-131.</li> <li>5. Alberti M., Marzluff J. M., Shulenberger E., Bradley G., Ryan C., Zumbrunnen C. Integrating Humans into Ecology: Opportunities and Challenges for Studying Urban Ecosystems. American Institute of Biological Sciences. BioScience 2003; 53(12) 1169-1179.</li> </ol>	

7. Sanderson, J dan Harris, L.D. 2000. Landscape Ecology. A Top Down approach. Lewis Publisher. Florida
8. Wu, J. G. (2006). Landscape ecology, cross-disciplinarity, and sustainability science. *Landscape Ecology*, 21, 1–4.
9. Wu, J. G. (2008). Making the case for landscape ecology: An effective approach tourban sustainability. *Landscape Journal*, 27, 41–50.
10. Wu, J. G. (2010a). Urban sustainability: An inevitable goal of landscape research. *Landscape Ecology*, 25, 1–4.
11. Wu, J. G. (2010b). Landscape of culture and culture of landscape: Does landscapeecology need culture? *Landscape Ecology*, 25, 1147–1150.
12. 11. Wu, J. G. (2013). Landscape sustainability science: Ecosystem services and humanwell-being