


MODULE HANDBOOK

	UNIVERSITAS PADJADJARAN FACULTY OF MATHEMATICS AND NATURAL SCIENCES BACHELOR OF BIOLOGY PROGRAMME	COURSE CODE : D10D-4008												
Module designation	Aquatic Ecology													
Semester in which the module is taught	4													
Persons responsible for the module	<ol style="list-style-type: none"> 1. Dr. Keukeu Kaniawati Rosada 2. Hikmat Kasmara, Drs, MS 3. Prof. Sunardi 4. Dr. rer. nat. Tri Dewi Kusumaningrum Pribadi 													
Medium of instruction	Indonesian													
Relation to curriculum	Compulsory Course													
Teaching methods	Lectures, Discussions, and Collaborative learning													
Workload	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Total workload</td> <td style="width: 30%;">: 8160 minute = 136 hour</td> <td style="width: 40%;"></td> </tr> <tr> <td>Lecture, discussion, and collaborative learning</td> <td>: 3 x 50 minute x 16 week = 2400 minute = 40 hour</td> <td></td> </tr> <tr> <td>Exercises</td> <td>: 3 x 60 minute x 16 week = 2880 minute = 48 hour</td> <td></td> </tr> <tr> <td>Self-study</td> <td>: 3 x 60 minute x 16 week = 2880 minute = 48 hour</td> <td></td> </tr> </table>		Total workload	: 8160 minute = 136 hour		Lecture, discussion, and collaborative learning	: 3 x 50 minute x 16 week = 2400 minute = 40 hour		Exercises	: 3 x 60 minute x 16 week = 2880 minute = 48 hour		Self-study	: 3 x 60 minute x 16 week = 2880 minute = 48 hour	
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Credit points	3.00 (5.43 ECTS)													
Required and recommended prerequisites for joining the module	General Ecology													
Module objectives/intended learning outcomes	<ol style="list-style-type: none"> 1. Able to explain the meaning of aquatic ecology 2. Able to explain the classification and zoning of aquatic ecosystems 3. Able to explain the physical and chemical properties of waters important for aquatic biota 4. Able to explain the system concept in aquatic ecology 5. Able to explain the microbial loop 6. Able to explain aquatic animal bioecology 7. Able to explain aquatic plant bioecology 8. Able to explain water quality assessment and biological indicators 9. Able to explain current aquatic environmental issues 													
Contents	The Aquatic Ecology course studies the productivity of a body of water (fresh and/or marine), including chemical, physical, and freshwater parameters. The emphasis of the course is mainly on aquatic biotas such as plankton, nekton, and benthos and their relation to physical-chemical parameters.													
Examination forms	Quiz, Midterm exam, Assignment, and Final exam													
Study and examination requirements	The minimum attendance in lectures is 80%. Final grades are evaluated based on quiz (25%), midterm exam (25%), assignment (25%), and final exam (25%)													
Reading lists	<ol style="list-style-type: none"> 1. Wetzel, R.G. 2001. Limnology: Lake and River Ecosystems. Third Edition. Academic Press 2. Dash, M. C., & Dash, S. P. (2009): Fundamentals of Ecology (3rd ed.), Tata McGraw-Hill Education Private Limited, New Delhi. 3. M. Begon, R.W. Howarth & C.R. Townsend (2014): Essentials of Ecology (4th ed). 4. Sigeo, DC. 2005. Freshwater Microbiology: Biodiversity and Dynamic Interactions of Microorganisms in the Aquatic Environment. Manchester: John Wiley & Son, Ltd. 													