



UNIVERSITAS NEGERI YOGYAKARTA
FACULTY OF MATHEMATICS AND SCIENCE
DEPARTMENT OF BIOLOGY EDUCATION

Colombo 1 Street Yogyakarta 55281

Phone: (0274)565411 Ext. 217, (0274)565411(Administration Office), fax
(0274)548203

Website:fmipa.uny.ac.id, E-mail :humas_fmipa@uny.ac.id

Bachelor of Science in Biology

MODULE HANDBOOK

Module name:	Laboratory Work Limnology
Module level,if applicable:	Undergraduate
Code:	BIO 6136
Sub-heading,if applicable:	-
Classes,if applicable:	-
Semester:	Even
Module coordinator:	Triatmanto, M.Si
Lecturer(s):	
Language:	Bahasa Indonesia
Classification within the curriculum:	Elective course
Teaching format / class hours per week during the semester:	100 minutes lectures, 120 minutes structured activities, and 120 minutes individual studyper week
Workload:	Total workload is 91 hours per semester which consists of 100 minutes lectures, 120 minutes structured activities, and 120 minutes individual study per week for 16 weeks.
Creditpoints:	1 SKS (3 ECTS)
Prerequisites course(s):	Ecology
Perogram Learning Outcomes:	<ol style="list-style-type: none">4. Comprehensively mastering Biology (core biology) to solve problems in the field of Biology (problem-solving) and to underlie the concepts of related sciences5. Mastering the techniques and methodologies in Biology as well as familiar with the equipment used in Biology laboratories in order to get the knowledge of Biology (how we know what we know)6. Being adaptive, creative, innovative in applying the concepts of Biology and other related fields7. Being skillful in applying the techniques used in laboratories and daily life9. Being able to work and create jobs/being an entrepreneur in the field of Biology10. Having managerial ability to supervise and evaluate workers

	and optimizing the networks in order to develop professionalism 11. Possessing scientific skills to support the ability to speak in local, national, and international forums															
Course Outcomes	After taking this course, the students have ability to: CO1. Design the field activities in aquatic ecosystem CO2. Identifying the abiotic factors in aquatic ecosystem CO3. Identifying the biotic factors in aquatic ecosystem CO4. Description the characters of aquatic ecosystem CO5. Communcate the character of the aquatic ecosystem by paper and presentation															
Content:	This course develops scientific and analytical skills in the aquatic ecosystems through discussion, observation, and presentation															
Study/exam achievements:	The final mark will be weight as follow: <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>N o</th> <th>CO</th> <th>Assessment Object</th> <th>Assessment Technique</th> <th>Weight</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1 to 5</td> <td>Attitudes , knowledge, and skills</td> <td>Survey, test, rubrics and manuals. portofolio</td> <td>100%</td> </tr> <tr> <td colspan="4" style="text-align: right;">Total</td> <td>100%</td> </tr> </tbody> </table>	N o	CO	Assessment Object	Assessment Technique	Weight	1	1 to 5	Attitudes , knowledge, and skills	Survey, test, rubrics and manuals. portofolio	100%	Total				100%
N o	CO	Assessment Object	Assessment Technique	Weight												
1	1 to 5	Attitudes , knowledge, and skills	Survey, test, rubrics and manuals. portofolio	100%												
Total				100%												
Forms of media:	Real objects, model, multimedia															
Reference:	<p>A. Barus, T.A. 2002. Pengantar Limnologi. Jurusan Biologi FMIPA Universitas Sumatera Utara, Medan</p> <p>B. Goldman, C.R. and Alexander, J.H. 1983. Limnology. McGraw-Hill Book Company, Japan</p> <p>C. Krebs, J.C., 1978. Ecology. The Experimental Analysis of Distribution and Abundance. Harper and Row Publisher, London.</p> <p>D. Sachlan, M., 1982. Planktonologi. Fakultas Peternakan dan Perikanan UNDIP, Semarang: pp. 1 -101</p> <p>E. URL:http://www.epa.gov/owow/watershed/wacademy/acad2000/ecology/r13.html</p>															

PLO and CO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11
CO1				✓	✓	✓	✓		✓	✓	✓
CO2				✓	✓	✓	✓		✓	✓	✓
CO3				✓	✓	✓	✓		✓	✓	✓
CO4				✓	✓	✓	✓		✓	✓	✓
CO5				✓	✓	✓	✓		✓	✓	✓