



Universitas Gadjah Mada
 Faculty of Agriculture
 Department of Fisheries

Course Syllabus

Course Code	Course Name	Credits	Semester	Course Status	Requirement
PIM 20191132	Limnology	2	1 st	Compulsory	-
Learning Outcome	1	Able to describe physical characteristics of freshwater environments (lake and reservoir)			
	2	Able to describe chemical characteristics of freshwater environments (lake and reservoir)			
	3	Able to describe biological characteristics of freshwater environments (lake and reservoir)			
Course Description	This course introduces basic characteristics of freshwater environments (lake and reservoir). The emphasis is on scientific understanding of the dominant biotic and abiotic factors, anthropogenic activity, and management of resources in lake, reservoir, streams, and rivers. The effect of climate variability and change on freshwater environment will also be highlighted in this course.				
Course Content	<ol style="list-style-type: none"> 1. Introduction to freshwater environments (lake and reservoir). 2. Scope of limnology. 3. Structure and function of freshwater environment. 4. Lake formation. 5. Properties of water. 6. Weather and climate. 7. Trophic structure. 8. Nutrient cycles. 9. Lake Trophic States. 10. Freshwater ecosystems. 11. Global Climate Change. 12. Management of freshwater resource and fisheries 				
Reference	<ol style="list-style-type: none"> 1. Goldman, C. R., and A. J. Horne. 1983. Limnology. 2nd edition. McGraw-Hill Inc., New York, 484 pp. 2. Golterman, H.L. 1975. Physiological Limnology. An Approach to the physiology of Lake Ecosystem. New York. 489 pp. 3. Lehmusluoto, P. 1995. National Inventory of the Major Lakes and Reservoir in Indonesia. Painamuskestus Oy. Helsinki. 56 pp. 4. Welch, P.S. 1952. Limnology. Mc.Graw-Hill Book Co. London. 538 pp. 				

	5. Wetzel, Robert G. 2001. Limnology – Lake and River Ecosystems, 3rd edition, Elsevier/Academic Press, San Diego.
Lecturer	Prof. Dr. Ir. Rustadi, M.Sc. Dr. Ir. Bambang Triyatno, M.P. Dr.rer.nat. Riza Yuliratno Setiawan, M.Sc. Tony Budi Satriyo, S.Pi, M.Sc, Ph.D.