

## UNIVERSITAS NEGERI YOGYAKARTA FACULTY OF MATHEMATICS AND NATURAL SCIENCES DEPARTMENT OF MATHEMATICS EDUCATION Colombo 1 Street Yogyakarta 55281 Phone: (0274)565411 Ext. 217, (0274)565411 (Administration Office), fax (0274)548203

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## **Bachelor of Education in Biology**

## MODULE HANDBOOK

Bachelor of Education in Biology MIODULE HANDBOOK								
Module name:	Nutrient and Health							
Module level, if	Undergraduate							
applicable:	Undergraduate							
Code:	BIP 6235							
Sub-heading, if applicable:	-							
Classes, if applicable:	-							
Semester:	Odd							
Module coordinator:	dr. Tutiek Rahayu							
Lecturer(s):	dr. Tutiek Rahayu							
Language:	Bahasa Indonesia							
Classification within the	Compulsory subject							
curriculum:								
Teaching format / class	100 minutes lectures and 120 minutes structured activities per week.							
hours per week during the								
semester:								
	Total workload is 91 hours per semester which consists of 100							
Work load:	minuteslectures, 120 minutes structured activities, and 120							
	minutes individual study per weekfor 16 weeks.							
Credit points:	2 SKS (3 ECTS)							
Prerequisites course(s):	-							
Program Learning	PLO 4. Mastering basic Biology and other relevant knowledge with							
Outcome	mathematics and natural sciences.							
	After taking the course, students are expected to be able to:							
	CO1. Identifying nutritional problems in humans.							
	CO2. Explain the classification of food ingredients, nutrient							
	content, nutritional value and life value in daily life.							
	CO3. Explain the needs, adequacy, and malnutrition.							
	CO4.Explain about macronutrients and micronutrients.							
Targeted learning	CO5. Explain and solve problems about diseases and disorders							
outcomes:	due to nutrient intake and have knowledge about balanced							
	menus.							
	CO6. Apply knowledge about the interaction of nutrients in daily							
	life.							
	CO7. Explain, formulate, design and solve problems about							
	diseases and disorders caused by nutritional interactions							
	that are detrimental to health.							

<ul> <li>CO8. Apply knowledge of various research models on nutrition for health as well as explain, formulate, design and solve problems faced around diseases caused by malnutrition.</li> <li>CO9. Explain and resolve problems encountered around diseases and digestive disorders.</li> <li>CO10. Apply knowledge about hypertension.</li> <li>CO11. Explain, formulating, designing, and solving problems about anemia.</li> <li>CO12. Having knowledge about stroke and being able to apply knowledge related to management and prevention.</li> <li>CO13. Apply knowledge about diseases in daily life.</li> <li>CO14. Apply knowledge about epilepsy.</li> <li>CO15. Apply knowledge about spirometry in daily life, able to solve problems faced around diseases and respiratory system disorders.</li> </ul>							
This course discusses the fulfillment of human nutrition in order to maintain health and improve health by managing the environment. This course is also to assist the development of problem-solving skills related to the application of Nutrition and Health in the analysis of health cases relating to the conditions of nutrition acquisition and various diseases that often occur in the population of Indonesia.							
The final mark will be weight as follow:							
No	СО	Assessment Object	Assessment Technique	Weight			
1	CO1 to CO15	Observed attitudes, knolwedge, and skills	Survey, test, rubrics and manuals	100%			
<ul> <li>Bogert. 2006. Nutrition and Physical Fitness. W.B. Sauders Company, New Yorkidem.</li> <li>Ganong. 1999. Fisiologi Kedokteran. Penerbit Buku Kedokteran EGC. Jakarta.</li> <li>Guyton. 2008 Fisiologi Kedokteran. Penerbit Buku Kedokteran EGC. Jakarta.</li> <li>Marieb, N.M. 2007. Human Anatomy and Physiology. Pearson Education Inc., San Francisco.</li> <li>Soewolo, Basuki S., Yudani, T. 1999. Fisiologi Manusia. IMSTEP JICA, FMIPA UNM, Malang.</li> </ul>							
	CO9. CO10 CO11 anem CO12 know CO13 CO14 CO15 This c maint course to the relatin that co The f No 1 Real c Boge Gano Guyto Marie Soew	health as problems CO9. Explain an and digest CO10. Apply kno CO11. Explain, f anemia. CO12. Having k knowledge relat CO13. Apply kno CO14. Apply kno CO15. Ap	health as well as explain, for problems faced around diseases         CO9. Explain and resolve problems er and digestive disorders.         CO10. Apply knowledge about hyperter         CO11. Explain, formulating, designing, anemia.         CO12. Having knowledge about strolknowledge related to management an CO13. Apply knowledge about disease         CO14. Apply knowledge about disease         CO15. Apply knowledge about epileps         CO15. Apply knowledge about spiro         solve problems faced around system disorders.         This course discusses the fulfillment of maintain health and improve health by m course is also to assist the development or to the application of Nutrition and Health relating to the conditions of nutrition act that often occur in the population of Indo         The final mark will be weight as follow         No       CO         Assessment         Object         1       CO1 to         CO15       attitudes, knolwedge, and skills         Real objects, model, multimedia         Bogert. 2006. Nutrition and Physic Company, New Yorkidem.         Ganong. 1999. Fisiologi Kedokteran. EGC. Jakarta.         Guyton. 2008 Fisiologi Kedokteran. EGC. Jakarta.         Marieb, N.M. 2007. Human Anatom Education Inc., San Francisco.         Soewolo, Basuki S., Yudani, T. 1999. JICA, FMIPA UNM, Malang.	health as well as explain, formulate, design problems faced around diseases caused by malnu         C09. Explain and resolve problems encountered arour and digestive disorders.         C010. Apply knowledge about hypertension.         C011. Explain, formulating, designing, and solving probanemia.         C012. Having knowledge about stroke and being able knowledge related to management and prevention.         C013. Apply knowledge about diseases in daily life.         C014. Apply knowledge about epilepsy.         C015. Apply knowledge about spirometry in daily life solve problems faced around diseases and system disorders.         This course discusses the fulfillment of human nutrition maintain health and improve health by managing the enviro course is also to assist the development of problem-solving sto the application of Nutrition and Health in the analysis of Prelating to the conditions of nutrition acquisition and various that often occur in the population of Indonesia.         No       CO       Assessment         No       CO       Assessment         Object       Technique         1       CO1 to       Observed         Survey, test, CO15       attitudes, rubrics and manuals         skills       Interchnique         1       CO1 to       Observed         Survey, New Yorkidem.       Ganong. 1999. Fisiologi Kedokteran. Penerbit Buku HeeGC. Jakarta.         Guyton. 2008       Fisiologi Kedokteran. Penerbit Buku HeeGC. Jakarta.			

## PLO and CO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12
CO1				$\checkmark$								
CO2				$\checkmark$								
CO3				$\checkmark$								
CO4				$\checkmark$								
CO5				$\checkmark$								
CO6				$\checkmark$								
CO7				$\checkmark$								
CO8				$\checkmark$								
CO9				$\checkmark$								
CO10				$\checkmark$								
CO11				$\checkmark$								
CO12				✓								
CO13				✓								
CO14				$\checkmark$								
CO15				$\checkmark$								