



THE MODULE HANDBOOK

Magister Biology Study Program FACULTY OF BIOLOGY

NUTRITION AND METABOLISM

Course code	BIMB 202112
Course level	Magister
Semester/ term	Odd and Even semester
Course coordinator(s)	Dr. Woro Anindito Sri Tunjung
Lecture(s)	<ol style="list-style-type: none">1. Dr. Rarastoeti Pratiwi, M.Sc.2. Dr. Yekti Asih Purwestri, M.Si.3. Dr. Tri Rini Nuringtyas, M.Sc.
Language	Bahasa Indonesia
Classification within the Curriculum	Compulsory course for Biomedical Science concentration and elective course for other concentrations.
Teaching format/ class hours per week during the semester	This Course is given every semester to the Magister Program regular students in Faculty of Biology, 1 meeting per week with time allocation of 100 minutes. Learning method delivery such as Teaching Centered Learning, Student Centered Learning combined with Collaborative Learning, Cooperative Learning, Case Based Learning and Problem Learning.
Workload	Estimated working hour: 2 credits of theory
Credits	2-0 credits
Requirements	-
Program Learning Outcome	<p>K1: biological theories, includes all aspects of biological studies at various levels in the organization of life.</p> <p>GS1: develop logical, critical, systematic, and creative thinking through scientific research; develop scientific concepts and present the results based on scientific rules, procedures, and ethics in the form of theses and scientific publications.</p> <p>GS5: use information technology in scientific development and implementing it in their area of expertise</p>
Course Learning Outcome	<p>CLO 1: Students understand the facts, concepts, principles and theories that apply to nutritional biochemistry essential oils in terms of biology and apply the biological concepts of essential oils to solve problems, and can integrate and evaluate information from various sources.</p> <p>CLO 2: Students can analyze and solve problems, and can integrate and evaluate information and nutritional data in living things from various sources.</p>



THE MODULE HANDBOOK

Magister Biology Study Program

FACULTY OF BIOLOGY

	<p>CLO 3: Students are skilled in communicating effectively, both written, oral and with tables and pictures and using communication and information technology, especially in the nutritional biochemistry field as well as applying and integrating several nutritional phenomena into biology and its branches.</p> <p>CLO 4: Students are skilled in using scientific literature to analyze problems in the field of nutritional biochemistry, have a basic curiosity, appreciate the originality of ideas, concepts and discoveries, views and other opinions that are interdisciplinary in exploring, utilizing and conserving natural resources, as well as being sensitive to changes and biological problems in global/regional/local scope</p>
Course Description	<p>This course explains the importance of nutritional biochemistry in humans life in relation to health problems. The lecture on Nutrition and Metabolism discusses types (especially protein) and sources of nutrition (from microorganisms, plants and animals), and the important role of nutrients for health and the study of their metabolism (energy balance, malnutrition and anti-nutrition). In addition, nutrigenomics and nutrigenetics are studied to understand health problems according to the latest scientific developments. Furthermore, study of functional food that supports health both in terms of metabolism, development as well as prospects for supporting health.</p>
Assesments	<ol style="list-style-type: none">1. Midterm: 35%2. Final examination: 35%3. Quiz and Paper assignment: 15%4. Presentation: 15%
Study Media	Computer, internet access, smart phone
Literature	<ol style="list-style-type: none">1. Whitney E and Rolfes S.R. 2008. Understanding Nutrition. Eleventh Edition (International Student Edition). Thomson, Wadsworth.2. Other references in the form of journal (e -journal) or e-book will be announced in each topic of the lecture.