



THE MODULE HANDBOOK
DOCTOR BIOLOGICAL SCIENCES STUDY PROGRAM
FACULTY OF BIOLOGY

SELECTED TOPIC FOR DISSERTATIONS

Capita Selecta

Course code	BIDB203103
Course level	Doctoral Program
Semester/ term	Odd/even
Course coordinator	Prof. Dr. Endah Retnaningrum, S.Si., M.Eng.
Lecture(s)	Prof. Dr. Endah Retnaningrum, S.Si., M.Eng. Prof. Dr. Budi S. Daryono, M.Agr.Sc.
Language	Indonesian/English
Classification within the Curriculum	Compulsory
Teaching format/ class hours per week during the semester	This course is planned to have 14 teaching weeks and 2 weeks of examination.
Workload	1,125 hours/day 5 days/week 5,625 hours/week 16 Weeks/Semester total workload : 90 hours/3,6 ECTS
Credits	3.6 ECTS
Requirements	-
Program Learning Outcome	CPL 1.1. Upon completing this program, the graduates demonstrate an attitude of being able to contribute to improving the quality of life in society, nation and state, and the progress of civilization based on Pancasila CPL 1.2. Upon completing this program, the graduates demonstrate an attitude of being able to demonstrate honesty, responsibility, self-confidence, emotional maturity, ethics, and awareness of being a lifelong learner CPL 2.1. Upon completing this program, the graduates demonstrate an understanding of the scientific philosophy of biology which is related in depth to structure, function, diversity, reproduction, evolution and engineering of biological systems. CPL 4.3. After participating in this program, graduates will be able to apply the philosophy of biological systems in developing biological concepts in the areas of food, health, bioenergy, biomaterial and/or the environment



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Course Learning Outcome	BIDB203103.1 By the end of this course, students will gain knowledge and understanding of the probiotic characteristics of lactic acid bacteria isolated from wild fruits in Indonesia. BIDB203103.2 By the end of this course, students will be able to analyze analyze the potential of lactic acid bacteria isolated from wild fruits in Indonesia as fermentation starters. BIDB203103.3 By the end of this course, students will be able to manage, lead, and develop research on the fermentation activity of selected lactic acid bacteria. BIDB203103.4 By the end of this course, students will be able to solve problems related to the standardization of lactic acid bacteria as fermentation starters for coffee
Course Description	This course explores the probiotic characteristics of lactic acid bacteria isolated from wild fruits in Indonesia and their potential as fermentation starters for coffee. It also examines the fermentation activity of lactic acid bacteria and the quality of fermented coffee products.
Assessments	The assessment for Selected Topic for Dissertations (Kapita Selekt) is based on two main components, with the respective criteria and weights: A. Participatory Activity (20%) • Stuctured Assigment/Task (10%) • Participation (10%) B. Project (80%) • Mid-Term Exam (30%) • Final-Term Exam (30%) • Project Result/Case Study/Project Based Learning result (20%)
Study Media and Literature	Main 1. Vinderola, G., Ouwehand, A., Salminen, S., Von Wright, A.2019. Lactic Acid Bacteria, Microbiological and Functional Aspects. 5th Edition. CRC Press. Additional 1. Wahidin, S. 2010. Lactic acid fermentation by immobilized bacteria identification of important factors that influence the performance of lactic acid production. VDM Verlag Dr. Müller