

Module Handbook

Module Name:	Bacteriology
Module Level:	Bachelor
Abbreviation, if applicable:	BIM103
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester/term:	Even
Module coordinator(s):	Dr. Ni'matuzzahroh
Lecturer(s):	Dr. Ni'matuzzahroh Drs. Agus Supriyanto, M.Kes Tri Nurhariyati, S.Si., M.Kes.
Language:	Indonesian language
Classification within the curriculum	Compulsory Course / Elective Studies
Teaching format / class hours per week during semester:	300 minutes/ week
Workload:	100 min lecture + 100 min structural assignment + 100 min self-assignment x 13 weeks; total 3900 min = 65 hours $65/25 = 2.6$ ECTS
Credit point	2
Requirements	General Microbiology
Learning goals/competencies	General Competence (Knowledge) Students are able to compare the diversity of bacteria and biological aspects Specific Competence <ol style="list-style-type: none">1. Students are able to describe the bacteria classification2. Students are able to describe the distribution and role of bacteria in nature3. Students are able to describe the characteristic of bacteria4. Students are able to describe the bacteria nutrition5. Students are able to describe the growth and bacteria breeding6. Students are able to describe the bacteria metabolism7. Students are able to describe the bacteria genetics8. Students are able to describe the isolation methods and identification of bacteria9. Students are able to compare the characteristic of Enterobacteriaceae10. Students are able to compare the characteristic of coccus bacteria11. Students are able to compare the characteristic of Actinomycetes12. Students are able to compare the characteristic of spiral bacteria13. Students are able to compare the characteristic of nitrogen-fixing bacteria

	14. Students are able to compare the characteristic of Gram negative and non-fermentative bacteria
Content	Classification, distribution and the role of bacteria, morphology of bacteria, nutrients bacteria, growth and development of bacteria, bacterial metabolism, genetics of bacteria, isolation and identification of bacteria, characterization Enterobacteriaceae, bacteria cocci, actinomycetes, bacteria spirals, bacterial nitrogen-fixing, gram-negative bacteria and non-fermentative.
Soft skill Attribute	Dicipline, team work, and communication
Study/ exam achievements	Students are considered to be competent and pass if at least get 40% of maximum mark of the exams and structural assignment. Final score (NA) is calculated as follow: Structural assignment (20%), Mid exam (40%), Final exam (40%) Final index is defined as follow: A : 75 - 100 AB : 70 - 74.99 B : 65 - 69.99 BC : 60 - 64.99 C : 55 - 59.99 D : 40 - 54.99 E : 0 - 39.99
Form of media	LCD, demonstration, Slides and LCD projectors, whiteboards
Learning Method	Class, and discussion
Literature	<ol style="list-style-type: none"> a. Salle, A.J.1961. <i>Fundamental Principles of Bacteriology</i>. Mc. Graw Hill Book Company. Inc. New York, Toronto, London. b. Cappucino, J.G. and Sheeman, N. 1983. <i>Microbiology in Laboratory Manual</i>. Addison-Wesley Publishing Company. c. Koneman, E.W. 1988. <i>Diagnosis Microbiology</i>. J.B. Lippincott Company. d. Holt, J.G. 1994. <i>Bergeys Manual of Determinatif Bacteriology</i>. William & Wilkins Baltimore.
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