

Module Handbook

Module Name:	Biochemistry (Practical Work)
Module Level:	Bachelor
Abbreviation, if applicable:	BIK203
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester/term:	Even (4 th semester)
Module coordinator(s):	MKWU Teaching Staff
Lecturer(s):	MKWU Teaching Staff
Language:	Bahasa Indonesia
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 Points:	1
Requirements:	-
Learning goals/competenc :	<p>General Competence (Knowledge)</p> <p>Students are able to practice the way of production, isolation, and analysis of biomolecules (proteins / enzymes, carbohydrates and fats), and analyzing reactions in the metabolic processes properly</p> <p>Specific Competence:</p> <ol style="list-style-type: none"> 1. Able to practice the isolation of casein from milk 2. Able to determine the protein that content casein 3. Able to invertase activity of yeast extract 4. Able to test the activity of urea 5. Able to isolate the glycogen from bovine liver 6. Able to practice hydrolysis with acid and enzyme glycogen 7. Able to practice the electron transport inhibitors and activators
Content:	Isolation of casein from milk; Determination of protein content of casein rough; Testing invertase activity of yeast extract / salivary amylase activity test / test protease activity of papaya latex; urease activity test; dextranase activity test; Isolation of glycogen from bovine liver; Hydrolysis with acid and enzyme glycogen ; Inhibition of the enzyme succinate dehydrogenase; electron transport inhibitors and activators; Effect of monolayer membrane lipids constituent of the transport of methyl blue dye.
Attribute soft skill	Discipline and cooperation
Study/exam achievements:	Students are considered to be competent and pass if at least get 40 of maximum mark of the exams (UTS and UAS), structured activity (group discussion). Final score (NA) is calculated as follow: 30% Paper project + 30% mid exam + 40% final exam.

	<p>Final index is defined as follow:</p> <p>A : 75 – 100</p> <p>AB : 70 - 74.99</p> <p>B : 65 - 69.99</p> <p>BC : 60 - 64.99</p> <p>C : 55 - 59.99</p> <p>D : 40 - 54.99</p> <p>E : 0 - 39.99</p>
Forms of Media:	Laboratory equipment
Learning Methods	Practical work
Literature	<p>a. Brady, J.E., 1992, <i>General Chemistry</i>, 5th ed., John Wiley and Sons, New York</p> <p>b. Brown, W.H., 1982, <i>Introduction to Organic Chemistry</i>, 3rd ed., Williard Grant Press, Boston.</p> <p>c. Wilbraham, A.C., Matta M.S., 1992, <i>Pengantar Kimia Organik dan Hayati (terjemahan Suminar Achmad)</i>, Penerbit ITB.</p>
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