UNIVERSITAS GADJAH MADA
FACULTY OF AGRICULTURAL TECHNOLOGY
DEPARTMENT OF FOOD & AGRICULTURAL PRODUCT TECHNOLOGY

BACHELOR IN FOOD & AGRICULTURAL PRODUCT TECHNOLOGY

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MODULE HANDBOOK

CHEMISTRY II (ORGANIC)

Module designation	Chemistry II (Organic)
Module code	TPHP211203
Module level	Bachelor
Semester(s) in which the module is taught	Semester 2 / Even Semester
Person responsible for the module	**Prof. Drs. Sabirin Matsyeh, Ph.D.** Prof. Dr. Drs. Winarto Haryadi, M.Si. Prof. Tri Joko Raharjo, S.Si., M.Si., Ph.D. Prof. Dra. Tutik Dwi Wahyuningsih, M.Si., Ph.D.
Language	Indonesian
Relation to curriculum	Compulsory Courses
Teaching methods	Case-based learning
Workload (incl. contact hours, self-study hours)	1. Lectures 2 credits x 50 minutes x 16 meetings = 1600 minutes = 26.67 hours = 26.67 hours/30 hours = 0.89 ECTS 2. Structured Assignments 2 credits x 60 minutes x 16 meetings = 1920 minutes = 32 hours = 32 hours/30 hours = 1.07 ECTS 3. Self-study 2 credits x 60 minutes x 16 meetings = 1920 minutes = 32 hours = 32 hours/30 hours = 1.07 ECTS Total workload = 3.03 ECTS (90.67 hours)

<table>
<tr><td>Credit points</td><td colspan="4">2 credits / 3.03 ECTS</td></tr>
<tr><td>Required and recommended prerequisites for joining the module</td><td colspan="4">No requirement needed</td></tr>
<tr><td rowspan="4">Module objectives/intended learning outcomes</td><td colspan="4">Programme Learning Outcome (PLO)</td></tr>
<tr><td>PLO P1</td><td colspan="3">Be able to explain the structure and properties of food components / agricultural products (carbohydrates, proteins, lipids, water, other components, and food additives) and chemical changes that occur during processing</td></tr>
<tr><td colspan="4">Module Learning Outcome (MLO)</td></tr>
<tr><td>MLO P1.2</td><td colspan="3">Be able to explain the chemical events that underlie the reactions of various food components</td></tr>
<tr><td>Content</td><td colspan="4">1. …</td></tr>
<tr><td rowspan="13">Examination forms</td><td>Evaluation Base</td><td>Evaluation Components</td><td>MLO</td><td>Percentage</td></tr>
<tr><td>A. Participatory Activities</td><td>Discussion</td><td></td><td></td></tr>
<tr><td rowspan="4">B. Case Study Results</td><td>Presentation</td><td></td><td></td></tr>
<tr><td>Report</td><td></td><td></td></tr>
<tr><td>Midterm Exam</td><td></td><td></td></tr>
<tr><td>Final Exam</td><td></td><td></td></tr>
<tr><td rowspan="4">C. Cognitive</td><td>Skill-Based Assessment (SBA)</td><td></td><td></td></tr>
<tr><td>Quiz</td><td></td><td></td></tr>
<tr><td>Midterm Exam</td><td></td><td></td></tr>
<tr><td>Final Exam</td><td></td><td></td></tr>
<tr><td></td><td>Total</td><td></td><td>100%</td></tr>
<tr><td>Study and examination requirements</td><td colspan="4">The final grade in the module is composed of (...% participatory activities, …% project results, and …% cognitive). Students must attend 75% of the total meetings to take the exam.</td></tr>
<tr><td>Reading list</td><td colspan="4">1. …</td></tr>
<tr><td>Last Modified</td><td colspan="4">January 31st, 2025</td></tr>
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