Module Handbook

<table>
<tr><td>Module Name</td><td colspan="5">Food and Agricultural Products Analysis</td></tr>
<tr><td>Module Level</td><td colspan="5">Higher Diploma</td></tr>
<tr><td>Code, if applicable</td><td colspan="5">VKT742</td></tr>
<tr><td>The subtitle, if applicable</td><td colspan="5">-</td></tr>
<tr><td>Courses, if applicable</td><td colspan="5">-</td></tr>
<tr><td>Semester(s) in which the module is taught</td><td colspan="5">Odd semester</td></tr>
<tr><td>A person responsible for the module</td><td colspan="5">Yuli Rohyami, M.Sc.</td></tr>
<tr><td>Lecturer</td><td colspan="5">Yuli Rohyami, M.Sc.</td></tr>
<tr><td>Language</td><td colspan="5">Bahasa Indonesia</td></tr>
<tr><td>Relation to curriculum</td><td colspan="5">Elective</td></tr>
<tr><td>Type of teaching, contact hours</td><td colspan="5">Student active learning and project based learning: (1) face to face: student active learning; (2) structure activities: project based learning; (3) independent study (4) exam: 6.47 hours x 16 weeks per semester</td></tr>
<tr><td rowspan="3">Workload</td><td colspan="3">Total Workload</td><td colspan="2">91 hours; 2 CU</td></tr>
<tr><td></td><td>Face to face</td><td>Structure activities</td><td>Independent study</td><td>Exam</td></tr>
<tr><td>Hours</td><td>24</td><td>28</td><td>28</td><td>11</td></tr>
<tr><td>Credit Points</td><td colspan="5">2 CU/3.37 ECTS</td></tr>
<tr><td>Requirements according to the examination regulations</td><td colspan="5">75% minimum requirements of attendance</td></tr>
<tr><td>Recommended prerequisites</td><td colspan="5">-</td></tr>
<tr><td>Module objectives/intended learning outcomes</td><td colspan="5">PLO 5: Able to contribute to solving problems in the scope of work.
Subject LO:
1. Students are able to apply principles of sample analysis methods for foodstuffs and agricultural products
2. Students are able to describe and analyze samples of food and agricultural products both instrumental and non-instrumental according to their characteristics
3. Students are able to respond, solve, and overcome problems related to food and agricultural products</td></tr>
<tr><td>Content</td><td colspan="5">1. Food safety standards (AOAC, HACCP)
2. Food sampling strategy
3. Water analysis
4. Analysis of carbohydrates
5. Protein analysis
6. Fat analysis
7. Vitamin analysis
8. Ash and mineral analysis
9. Metabolite material analysis
10. Analysis of food additives and food contamination</td></tr>
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Study and examination requirements and forms of examination	Subject LO	Examination requirements and forms of examination	Percent
	1	Quizzes, assignment, midterm exam, final exam	40
	2	Quizzes, assignment, midterm exam, final exam	30
	3	Quizzes, assignment, midterm exam, final exam	30
Media employed	Google classroom, youtube, zoom meeting, google form, google doc		
Reading list	1. Apriyantono, A., Dedi F., Ni Luh P., Sedar N., Slamet B., 1989, Analisis Pangan, Departemen Pendididikan dan Kebudayaan, Direktorat Jenderal Pendidikan Tinggi, Pusat Antar Universitas Pangan dan Gizi, Institut Pertanian Bogor 2. Charley, H., Weaver, C., 1998, Foods, A Scientific Approach. Prentice-Hall, Inc., New Jersey 3. deMan, J.M., 1999, Principles of Food Chemistry, Aspen Publishers, Inc. Gaithersburg, Maryland 4. Fennema, O.R., 1996, Food Chemistry, Marcel Dekker, Inc., New York 5. Meyer, L.H. (1973). Food Chemistry, Reinhold Corporation , New York 6. Pomeranz, Y, Meloan, C.E., 1994, Food Analysis : Theory and Practice 3rd Ed., Chapman and Hall, New York 7. Sudarmadji,S., Haryono, B., 1997, Suhardi, Prosedur Analisis untuk Bahan Makanan dan Pertanian, Liberty, Yogyakarta 8. Winarno, F.G., 1997. Kimia Pangan dan Gizi. PT Gramedia, Jakarta		