

Module Description

MPKP 315 Pesticide Chemistry

Module Name	Pesticide Chemistry
Module level, if applicable	Undergraduate Programme
Code, if applicable	MPKP 315
Subtitle, if applicable	-
Course, if applicable	-
Semester(s) in which the module is taught	5 nd Semester
Module coordinator(s):	Assoc.Prof. Afghani Jayuska, M.Si
Lecturer	Assoc.Prof. Afghani Jayuska, M.Si; Assoc.Prof. Dr. M.Agus Wibowo, M.Si.
Language	Bahasa Indonesia
Relation to curriculum	Elective Courses for the Undergraduate Programme in Chemistry
Type of teaching, contact hours	Decide teaching/training components for each course outcome ● Theory /Face-to-face lecture (for understanding): 8 lecture meetings ● Practical (to develop skill): - ● Seminar (for communication skills) : 3 ● Problems: 2 ● Assignments: 2 ● Project (small, group, etc): 1
Workload	<i>(Estimated) Total workload: 3 x 2,83 hours = 11,33 hours.</i> <i>Contact hours (lecture): 4 x 0,83 hours = 3,33 hours.</i> <i>Private study including examination preparation, specified in hours: 4 x 2 hours = 8 hours</i> <i>2 x 50 minutes lectures,</i> <i>2 x 60 minutes structured activity,</i> <i>2 x 60 minutes individual activity,</i> <i>14 weeks per semester,</i> <i>80 total hours</i>
Credit points	2 (3.34 ECTS)
Requirements	Registered in this course

according to the examination regulations	Minimum 75% attendance in this course												
Learning goals/competencies:	Intended Learning Outcomes (ILO) After taking this course, students will be able to: - LO-1 - LO-3												
Module objectives	- Students are able to explain plant pests and diseases and the role of pesticides. - Students are able to explain the dangers of pesticide use. - Students are able to explain the physicochemical concepts and formulation of pesticides. - Students are able to explain the principles of pesticide application properly and correctly. - Students are able to explain the manufacture of organic pesticides and their application.												
Content:	- Introduction - Plant Diseases and Pesticides, - Dangers of Pesticide Use - Pesticide Physicochemistry and Pesticide Formulation, - Proper and Correct Pesticide Application - Organic Pesticide Production and Application												
Attribute Soft skill:	Discipline, collaboration, responsibility, and argumentation in the natural classroom setting												
Recommended prerequisites	General Chemistry I, General Chemistry II, Fundamentals of Organic Chemistry												
Study and examination requirements and forms of examination	Students are considered to be competent and pass if they get at least 50% of the maximum final grade. The final grade (NA) is calculated based on the following : <table border="1"> <thead> <tr> <th>Assessment Components</th><th>Percentage Contribution</th></tr> </thead> <tbody> <tr> <td>Participation</td><td>10%</td></tr> <tr> <td>Assignment</td><td>20% - 30%</td></tr> <tr> <td>Mid-semester test</td><td>35 %</td></tr> <tr> <td>Final semester test</td><td>35%</td></tr> <tr> <td>Total</td><td>100%</td></tr> </tbody> </table>	Assessment Components	Percentage Contribution	Participation	10%	Assignment	20% - 30%	Mid-semester test	35 %	Final semester test	35%	Total	100%
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	The student competency is assessed from activity student in the class, assignments, quizzes, presentations, and tests
Learning Methods	- Case-Based Teaching Method - Team-Based Project
Media employed	- white board; power point presentation; and e-learning system
Reading list	1. Sopialena, 2027, Segitiga Penyakit tanaman, Mulawarman University Press, Samarinda. 2. Asmaliyah, Etik Erna Wati H., Sri Utami, Kusdi Mulyadi, Yudhistira, Fitri Windra Sari, 2010, Pengenalan Tumbuhan Penghasil Pestisida Nabati dan Pemanfaatannya Secara Tradisional, Badan Penelitian dan Pengembangan Kehutanan Pusat Penelitian dan Pengembangan Produktivitas Hutan 3. Soenandar, M. Aeni, M.N. dan Raharjo, A., 2010, Petunjuk Praktis Membuat Pestisida Organik, Agro Media Pustaka, Jakarta. 4. Sudarmo, S., 2005, Cara Praktis Pembuatan Pestisida Nabati Aman dan Ramah Lingkungan dengan Teknik Pengujian Sederhana, Kanisius, Yogyakarta