

Module Handbook

Modul Name	Advance Topics in Organic Chemistry
Module Level	Bachelor
Abbreviation, if applicable	KST 409
Sub-heading, if applicable	-
Course included in the module, if applicable	-
Semester/term	7 TH /Fourth Year
Modul coordinator(s)	Dr. Alfinda Novi Kristanti, DEA
Lecturer(s)	Dr. Nanik Siti Aminah, M.Si. Dr. Pratiwi Pudjiastuti, M.Si.
Language	Bahasa Indonesia
Classification within the curriculum	Elective Studies
Teaching format/class hours per week during the semester	4 hours laboratory work (50 min / hours)
Workload	4 hours doing worksheet and pretest preparation, 4 hours laboratory work, 4 hours group discussion, searching literature and writing report, 13 week per semester, and total 156 hours per semester ~ 5.2 ECTS *
Credit point	2
Requirement	Organic Chemistry II
Atribut softskill	Discipline, team-work, confidence
Learning Outcomes	<p>General competence (knowledge):</p> <ol style="list-style-type: none"> 1. Being able to decipher understanding, resources, benefits, and analyzes how the problems facing Indonesian essential oil products 2. Being able to choose the basic ingredients and preparing samples of essential oil to be used 3. Being able to prepare all the basic ingredients for making essential oil-based cosmetics 4. Being able to explain the phase transfer catalyst, working principles and benefits of a phase transfer catalyst 5. Describe the neighbor alkaloids, identification of alkaloids, a variety of alkaloids and biosynthesis, and bioactivity alkaloids <p>Specific Competence:</p> <ol style="list-style-type: none"> 1. Capable of producing essential oils from raw materials that have been selected and prepared in advance 2. Capable of producing essential oil-based cosmetics 3. Able to produce cosmetics with attractive packing 4. Having the ability to apply concepts atsitri oil-based material to be applied in the production of essential oils and cosmetics production
Content	Special topics in the field of organic chemistry based on the development of cutting-edge science Essential oils (understanding, benefits), the production of essential oils and cosmetics. Phase transfer catalysts (the working principle and benefits) and alkaloids (identification, alkaloid biosynthesis and bioactivity)
Study/exam	Students are considered to be competent and pass if at least get 55.

achievements	<p>Final score is calculated as follows: 50% practicum report + 50% Final Exam</p> <p>Final index graduation A: 75-100 AB:70-74.9 B: 65-69.9 BC: 60-64.9 C: 55-59.9 D:40-54.9 E<40</p>
Forms of media	Slides and LCD projectors, whiteboard, laboratory equipments
Learning Methods	Lectures, discussion, laboratory practice
Literature	The latest scientific journals and text book appropriate with the topic.
Note	<p>*Total ECTS = $\{(total\ hours\ workload\ \times\ 50\ min)\ / 60\ min\} / 25\ hours$ Each ECTS is equals with 25 hours</p>