Module Descriptions

Module designation	**Poly-function Organic Compound**
Semester(s) in which the module is taught	4th Semester/ Second Year
Person responsible for the module	Dr. First Ambar Wati
Language	Bahasa Indonesia (Regular Class) Bahasa Inggris (Internasional Class)
Relation to curriculum	Compulsory course
Teaching methods	Project-Based Learning, 3 workhours per week (3 x 170 minutes per week)
Workload (incl. contact hours, self-study hours)	1 CU for a bachelor's degree equals 170 minutes (50 minutes face-to-face, 60 minutes structured, 60 minutes independent learning) per week × 14 weeks, excluding mid and end-term exams. = 39.67 work hours per semester = 1.587 ECTS.
Credit points	3 Credit Units (CU) = 4.77 ECTS
Required and recommended prerequisites for joining the module	Mono-function Organic Compound
Module objectives/intended learning outcomes	1. Developing logical, critical, systematic, creative and innovative thinking in the context of developing or implementing science and technology in the field of education 2. Able to apply science process skills, critical thinking, creativity and problem solving to produce appropriate conclusions based on the results of the identification that has been carried out, and able to apply educational, research and management skills in the implementation of chemistry education. 3. Mastering the concept (knowledge) about the theory of the structure of organic compounds, monofunctional compounds: dicarboxylic acids, dienes, polyfunctional organic compounds, polycyclic and heterocyclic aromatic hydrocarbons, carbohydrates, proteins, lipids, and biological organic compounds. 4. Having a responsible attitude in applying the concept of polyfunctional organic compounds, polycyclic and heterocyclic aromatic hydrocarbons, carbohydrates, proteins, lipids, and biological organic compounds. 5. Able to carry out analysis of simple organic compounds including identification of carbohydrates, lipids, proteins, and biological organic compounds
Content	Studies on polyfunctional organic compounds, polycyclic and heterocyclic aromatic hydrocarbons, carbohydrates, proteins, lipids, and biological organic compounds.

Examination forms	Essay and Oral Presentation
Study and examination requirements	**Study and Examination Requirements/Assessment:** Individual assignments (case analysis reports) Group case studies and discussions Laboratory identification tasks Documentation and presentation of case study findings Laboratory works **Assessment Recap (Case Study-Oriented):** Participatory Activities/Case Study Analysis: 60% PracticalAssessment: 25% Test: 15%% Total: 100%
Reading list	1. Saputri, R. D., Wati, F. A., Purnamasari, A. P., Ilmi, H., Tjahjandarie, T. S., Mardhiyyah, S., & Tanjung, M. (2024). Three novel dihydrochalcones from Flemingia lineata (L.) WT Aiton and their antiplasmodial activity. Natural Product Research, 1-8. 2. Wardana, A. P., Abdjan, M. I., Aminah, N. S., Fahmi, M. Z., Siswanto, I., Kristanti, A. N., ... & Takaya, Y. (2022). 3, 4, 3′-Tri-O-methylellagic acid as an anticancer agent: in vitro and in silico studies. RSC advances, 12(46), 29884-29891. 3. Kristanti, A. N., Aminah, N. S., Siswanto, I., Manuhara, Y. S. W., Abdjan, M. I., Wardana, A. P., ... & Takaya, Y. (2022). Anticancer potential of β-sitosterol and oleanolic acid as through inhibition of human estrogenic 17beta-hydroxysteroid dehydrogenase type-1 based on an in silico approach. RSC advances, 12(31), 20319-20329. 4. Solomon, T.W.G. & Fryhle, C.B. (2016). Organic Chemistry. New York: John Wiley & Sons, Inc. 5. McMurry, J. (2016). Organic chemistry. Cengage Learning