

Module Handbook

Module Name:	General organic chemistry
Module Level:	Bachelor
Abbreviation, if applicable:	KIO103
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester/term:	Odd (3 rd semester)
Module coordinator(s):	MKWU Teaching Staff
Lecturer(s):	MKWU Teaching Staff
Language:	Bahasa Indonesia
Classification within the curriculum	Compulsory Course / Elective Studies
Teaching format / class hours per week during semester:	300 minutes/ week
Workload:	100 min lecture + 100 min structural assignment + 100 min self-assignment x 13 weeks; total 3900 min = 65 hours 65/25 = 2.6 ECTS
Credit Points:	2
Requirements:	-
Learning goals/competencies:	General Competence (Knowledge) Students are able to explain the structure of organic compounds correctly and able to explain chemical organic reactions correctly. Specific Competence: <ol style="list-style-type: none">1. Able to understand and explain the structure of aliphatic hydrocarbon and the chemical reaction correctly2. Able to understand and explain alkenes and the chemical reaction correctly3. Able to understand and explain the structure of alkyl halides and the chemical reaction correctly4. Able to understand and explain the structure of aromatic compounds and the chemical reaction correctly5. Able to understand and explain the structure of alcohol and ether and the chemical reaction correctly6. Able to understand and explain the structure of carboxylic acid and the chemical reaction correctly7. Able to understand and explain the structure of derivative of carboxylic acid and the chemical reaction correctly8. Able to understand and explain the structure of amines and the chemical reaction correctly9. Able to understand and explain the structure of lipids and the chemical reaction correctly10. Able to understand and explain the structure of carbohydrates and the chemical reaction correctly11. Able to understand and explain the structure of amino acid and protein and the chemical reaction correctly12. Able to understand and explain the structure of nucleotide and nucleic acid and the chemical reaction correctly

Content:	Introduction; aliphatic hydrocarbon; alkenes; alkyl halide; aromatic compounds; alcohol and ether; carboxylic acid; derivative of carboxylic acid; amines; lipid; carbohydrate; amino acid and protein; nucleotide and nucleic acid
Attribute soft skill	Discipline and argumentation
Study/exam achievements:	Students are considered to be competent and pass if at least get 40 of maximum mark of the exams (UTS and UAS), structured activity (group discussion).
	Final score (NA) is calculated as follow: 20% Paper project + 10% quiz + 30% mid exam + 30% final exam + 10% soft skill Final index is defined as follow: A : 75 – 100 AB : 70 - 74.99 B : 65 - 69.99 BC : 60 - 64.99 C : 55 - 59.99 D : 40 - 54.99 E : 0 - 39.99
Forms of Media:	Slides and LCD projectors, whiteboards
Learning Methods	Class and discussion
Literature	<ul style="list-style-type: none"> a. Morrison, R.T., Boyd, R.N., 1982. <i>Organic Chemistry</i>, 6th ed., Prentice Hall International Inc. London b. Buxton, S.R., Robert, S.M. 1996. <i>Guide to Organic Stereochemistry</i>, Addison Wesley Longman. Essex c. Fessenden, R. Fessenden J., 1994. <i>Organic Chemistry</i>, 5th ed., Wadsworth, Inc Belmont, California
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