

220221172 Basic Chemistry

Module Name	Basic Chemistry
Module Level, if applicable	Beginner
Code if Applicable	220221172
Subtitle, if applicable	-
Courses, if applicable	220221172 Basic Chemistry
Semester(s) in which the module is taught	1 st
Person responsible for the module	Vritta Amroini Wahyudi, S.Si, M.Si
Lecturer	Drs. Mujianto, M.P
Language	Indonesian
Relation to curriculum	Compulsory Course for undergraduate program in the Food Technology Department, Faculty of Agriculture and Animal Science
Type of teaching	Lecture, Project
Workload	<ul style="list-style-type: none">● Lecture: 3 SKS X 50 minutes X 16 weeks● Project: 3 SKS X 60 minutes X 16 weeks● Independent learning: 3 SKS X 60 minutes X 16 week
Credit points	3 SKS X 1.5 = 4,5 ECTS
Requirements according to the examination regulations	<ol style="list-style-type: none">1. Registered in this course2. Minimum 80% attendance in this course
Recommended prerequisites	-
Module Objectives (Intended learning outcomes)	<p>On successful completion of this course, student should be able to:</p> <ul style="list-style-type: none">● Classify quantities and unit conversions in measurements● Apply notation and important numerical rules in scientific measurements● Distinguish materials based on physical and chemical characteristics● Identify changes in substances and methods of their separation● Explain the development of the theory and characteristics of the constituent of the atom● Distinguish compounds and determining the proper name based on their characteristics● Explain the concepts of relative mass and molar mass● Write down the reaction equation of a chemical compound● Describe the properties of gas particles and the kinetic laws of gases● Apply chemical calculations to gas-

	phase reactions
Module Content	This course is designed to provide students with a foundational understanding of the principles of chemistry. Topics covered include the structure of atoms, the periodic table, chemical bonding, chemical reactions, and the properties of matter. The course will also explore the basic concepts of stoichiometry, thermochemistry, and the behavior of gases.
Study and examination requirements and forms of examination	Cognitive: Midterm exam, Final exam, Quizzes, Assignments Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort
Media employed	The course will be delivered through a combination of lectures, laboratory experiments, and discussions. Students will have the opportunity to apply their knowledge through hands-on experiments and problem-solving exercises. The class activity used whiteboard and PowerPoint. It can add some tools to support some activities.
Recommended Literature	For Class A. Compulsory 1. Sastrohamidjojo, H. 2012. Kimia Dasar. Yogyakarta : UGM Press. 2. Brady, J. E. (Editor: Syarifudin, Yayan Wulandari). 2000. Kimia universitas asas dan struktur jilid 1. Tangerang : Binarupa Aksara 3. Brady, J. E. (Editor: Syarifudin, Yayan Wulandari). 2000. Kimia universitas asas dan struktur jilid 2. Tangerang : Binarupa Aksara B. Option 1. Herring, E. G. 2007. Kimia Dasar : Prinsip-Prinsip & Aplikasi Modern Jilid 1. Jakarta : Erlangga. 2. Herring, E. G. 2007. Kimia Dasar : Prinsip-Prinsip & Aplikasi Modern Jilid 2. Jakarta : Erlangga.
Date of Last Amendment	22nd Agustus 2022