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Module designation	Basic Chemistry I
Module level, if applicable	Undergraduate
Code, if applicable	PIPAUM6301
Subtitle, if applicable	-
Courses, if applicable	-
Semester(s) in which the module is taught	Even/Autumn Term
Person responsible for the module	Isnanik Juni Fitriyah, S.Pd., M.Si.
Lecturer	Isnanik Juni Fitriyah, S.Pd., M.Si., Dr. Munzil, M.Si.
Language	Bahasa Indonesia
Relation to curriculum	Undergraduate degree program, elective, 1th semester.
Type of teaching, contact hours	Direct instruction for lectures, cooperative learning for experiments, 200 minutes for lectures and 170 minutes for experiments per week
Workload	1. Lectures: 4 x 50 = 200 minutes (3.3 hours) per week. 2. Exercises and Assignments: 4 x 60 = 240 minutes (4 hours) per week. 3. Private study: 4 x 60 = 240 minutes (4 hours) per week. 4. Experiments: 170 minutes per week
Credit points	4 credit points (~6.35 ECTS-eq).
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to sit in the exams.
Recommended prerequisites	
Module objectives/intended learning outcomes	After completing this module, students are expected to: LO 3: master basic chemistry knowledge using the Nature of Science (NOS) along with logical, critical, systematical, and innovative thinking in team collaboration using local potential and information technology development. LO 4: analyze science phenomena in an integrated manner to solve problems logically, critically, systematically, and critically using information technology as data

	resources in the form of team work that respect the originality of other works.
Content	1. Basic principles of chemistry: elements, compounds, mixtures, separation of mixtures, atomic theory, basic laws of chemistry, trivial nomenclature, IUPAC chemical compounds. 2. Chemical reactions; physical changes, chemical changes, 3. Stokiometry; number of particles, mass, moles, volume, molarity, 4. Chemical bonds; types, properties and structure of substances, The topics on the subject are focused to the following subtopics: 1. Elements, compounds, mixtures. 2. Methods of separation of compounds and mixtures. 3. Atomic theory 4. Basic laws of chemistry 5. Trivial nomenclature 6. IUPAC nomenclature 7. Chemical changes 8. Chemical changes 9. Stokiometry 10. Chemical bonds 11. The nature and structure of the substance 12. Types of chemical reactions.
Study and examination requirements and forms of examination	Assessment of student learning achievement by assessing daily assignments, class discussions, practical performance, writing experiment reports, midterm and final semester exams
Media employed	Kahoot, sipejar, youtube
Reading list	1. Chang, R. & Goldsby, K.A. 2015. *Chemistry. (12th Edition).* Florida: Mc Graw Hill Education. 2. Barke, H., Al Hazari & Yitbarek, S. 2009. *Misconceptions in Chemistry*. Berlin: Springer.
Date of last amendment made	May, 2020