



Diponegoro University
Faculty of Science and Mathematics
Undergraduate Program Of Chemistry

Module designation	Medical Biochemistry (BMed)
Semester(s) in which the module is taught	5
Person responsible for the module	Purbowatiningrum Ria Sarjono., M.Si.
Language	Indonesian
Relation to curriculum	Compulsory /elective/ specialisation
Teaching methods	Lecture
Workload (incl. contact hours, self-study hours)	Face to face: 1 x (2 x 50") Structured study + Self study = 1 x [(2 x 60") + (2 x 60")]
Credit points	2
Required and recommended prerequisites for joining the module	Bio1
Module objectives/intended learning outcomes	(M1) Able to explain and understand the link between medicine and health (M2) Able to explain and understand Metabolism in the Human Body (M3) Able to explain the Mechanism of Drugs in the Body (M4) Able to explain and understand the types of diseases (M5) Able to understand and explain disease diagnosis (M6) Able to understand and explain Vaccines and Gene Therapy (M7) Able to present current biomedical research

Content	<ol style="list-style-type: none"> 1. Compound reactivity, Inter-molecular interactions, the link between medicine and health 2. Inter-molecular interactions, biomolecules, integration of metabolic processes in the body 3. Inter-molecular Interaction, Biomolecules, Metabolism Deviation 4. Inter-molecular interactions, molecular structure, types of drugs 5. Inter-molecular interactions, molecular structure, Biology, Travel of drugs in the body 6. Inter-molecular interactions, molecular structure, compound reactivity, structure relationship, and biological drug activity 7. Inter-molecular interactions, molecular structure, Mechanism of drugs in the body 8. Inter-molecular interactions, molecular structure: Infectious Diseases, Diseases due to Dietary/Dietary Deviations 9. Inter-molecular interactions, molecular structure: Hereditary Diseases, Psychological Diseases 10. Inter-molecular interactions, molecular structure, conventional diagnosis (microbiological tests, cholesterol, blood sugar, urine, SGPT, SGOT, etc.) 11. Inter-molecular interactions, molecular structure, Advanced Diagnostics (PCR, ELISA, RFLP, etc.) 12. Inter-molecular interactions, molecular structure, definition, and types of vaccines, vaccine production 13. Inter-molecular interactions, molecular structure, compound reactivity, gene therapy, and its applications 14. Current topics in medical biochemistry
Exams and assessment formats	Mid-Semester Exam and Final Exam
Study and examination requirements	Participatory Activities -5% Project Results -30% Cognitive/Task Knowledge -20% Task -5% Mid-semester -20% Final exams -20%
Reading list	<ol style="list-style-type: none"> 1. Foye, W., (2007), Principles of Medicinal chemistry, 4 th ed, UGM Press, Yogyakarta 2. Moh Anief, Perjalanan dan Nasib Obat, 2007, UGM Press, Yogyakarta