



Diponegoro University
Faculty of Science and Mathematics
Undergraduate Program Of Chemistry

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| Module designation | General Physics 2 (FD2) |
| Semester(s) in which the module is taught | 3 |
| Person responsible for the module | Prof. Dr. Agus Subagio, S.Si., M.Si. Dr.Eng. Ali Khumaeni, S.Si.,M.E |
| Language | Indonesian |
| Relation to curriculum | Compulsory/ elective / specialisation |
| Teaching methods | Lecture |
| Workload (incl. contact hours, self-study hours) | Face to face= 1x(2x50") Structured tasks + self study = 1x(2x60"+2x60") |
| Credit points | 2 |
| Required and recommended prerequisites for joining the module | - |
| Module objectives/intended learning outcomes | (S9) Demonstrates an attitude of being responsible for work in his field of expertise independently (PP2) Mastering complete operational knowledge of functions, operating standard chemical instruments, and analyzing data and information from these instruments (KU1) Able to apply logical, critical, systematic, and innovative thinking in the development or implementation of science and technology that pays attention to and uses humanities values by their field of expertise (KU2) Able to demonstrate independent, quality, and measurable performance |

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| Content | <ol style="list-style-type: none"> 1. The concept of measurement and units 2. Rectilinear motion 3. curvilinear motion 4. Circular motion (Angular velocity, angular acceleration, relative rotational motion, and motion relative to the earth) 5. Formulating force and momentum 6. Formulate the application of the laws of motion 7. Formulate the application of the laws of motion 8. Formulate the concept of work and energy 9. Oscillation motion 10. Gravitational interaction 11. Particle system momentum 12. Particle system energy concept 13. Longitudinal wave concept 14. Longitudinal wave concept |
| Exams and assessment formats | Mid-Semester Exam and Final Exam |
| Study and examination requirements | <p>Participatory Activities -20%</p> <p>Project Results -30%</p> <p>Cognitive/Task Knowledge -10%</p> <p>Quiz -10%</p> <p>Mid-semester -15%</p> <p>Final exams -15%</p> |
| Reading list | <ol style="list-style-type: none"> 1. Paul A Tipler and Gene Mosca, Physics For Scientists and Engineers, WH Freeman Company 2. Jearl Walker, David Haliday and Robert Resnick, Fundamental Of Physics, X editions, 2015 3. Hugh Young and Roger Freedman, University Physics 12 th Edition, Addison Wesley San Fransisco Boston New York |