

Module Description

MPU 102 General Physics

Module Name	General Physics
Module Level, if applicable	Undergraduate Programme
Code, if applicable	MPU 102
Subtitle, if applicable	-
Course, if applicable	-
Semester (s) in which the module is taught	1 st Semester
Module Coordinator (s)	Firman Shantya Budi, S.Pd.,M.Sc
Lecturer	Riza Adriat, S.Si.,M.Si Radhitya Perdhana, S.Si., M.Sc.
Language	Bahasa Indonesia
Relation to curriculum	Compulsory course for undergraduate programme in Chemistry
Type of teaching, contact hours	Decide teaching/training components for each course outcome <ul style="list-style-type: none"> ● Theory/face to face lecture (for understanding) : 9 lecture meeting ● Seminar (for communication skill) : 1 ● Problem : 2 ● Assignments : 2
Workload	(Estimated) Total workload: 2 x 2,83 hours = 5,66 hours per week. Contact hours (lecture): 2 x 0,83 hours = 1,66 hours per week Private study including examination preparation, specified in hours: 2 x 2 hours = 4 hours per week 2 x 50 minutes lectures, 2 x 60 minutes structured activity, 2 x 60 minutes individual activity, 80 total hours
Credit Points	2 (3.34 ECTS)
Requirements according to the examination regulations	Registered in this course Minimum 75% attendance in this course

Learning goals/competencies:	Intended Learning Outcomes (ILO) After taking this course, students will be able to: <ol style="list-style-type: none"> 1. LO-1 2. LO-3 												
Module objectives	<ol style="list-style-type: none"> 1. Students are able to demonstrate responsibility for their work in their field of expertise independently. 2. Students are able to explain the physics principles that support chemical concepts. 3. Students are able to take responsibility for achieving group work outcomes and conduct supervision and evaluation of tasks assigned to workers under their responsibility. 4. Students are able to conduct self-evaluation of their workgroup under their responsibility and manage learning independently. 												
Content	<ol style="list-style-type: none"> 1. Quantities and Units 2. Vector Quantities 3. Kinematics 4. Dynamics 5. Work and Energy 6. Momentum and Impulse 7. Rotation motion 8. Fluids 												
Attribute Soft skill	Discipline, collaboration, responsibility, and argumentation in the natural classroom setting												
Recommended prerequisites	-												
Study and examination requirements and forms of examination	Students are considered to be competent and pass if they get at least 50% of the maximum final grade. The final grade (NA) is calculated based on the following : <table border="1" data-bbox="619 1568 1173 1937" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Assessment Components</th> <th style="text-align: center;">Percentage Contribution</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Participation</td> <td style="text-align: center;">10%</td> </tr> <tr> <td style="text-align: center;">Assignment</td> <td style="text-align: center;">20%</td> </tr> <tr> <td style="text-align: center;">Mid-semester test</td> <td style="text-align: center;">35 %</td> </tr> <tr> <td style="text-align: center;">Final semester test</td> <td style="text-align: center;">35%</td> </tr> <tr> <td style="text-align: center;">Total</td> <td style="text-align: center;">100%</td> </tr> </tbody> </table>	Assessment Components	Percentage Contribution	Participation	10%	Assignment	20%	Mid-semester test	35 %	Final semester test	35%	Total	100%
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	Mid and final semester tests are carried out as essay exams.
Learning Methods	Case-Based Teaching Method
Media employed	White board; power point presentation; and e-learning system
Reading list	<ol style="list-style-type: none">1. Halliday and Resnick, 2011, Fundamentals of Physics, John Willey and Sons, Inc2. Giancoli, D. C., 2005, Physics: Principles with Applications, Pearson Education, Inc.