

FI346 Volcano Physics

Module name:	Volcano Physics	
Module level, if applicable:	Undergraduate	
Code:	FI346	
Sub-heading, if applicable:	-	
Classes, if applicable:	-	
Semester:	3 rd	
Module coordinator:	Nanang Dwi Ardi	
Lecturer(s):	Nanang Dwi Ardi	
Language:	Bahasa Indonesia	
Classification within the curriculum:	Elective course	
Type of Teaching	Contact hours per week during the semester	Class Size
<ol style="list-style-type: none"> 1. Lecture (conceptual, contextual and problem-solving approaches through expository, discussions and exercises). 2. Structured activities (assignments based on conceptual, contextual and problem-solving approaches) 3. Self-study (reading literature) 	100 minutes	35
Workload:	Total workload is 91 hours (3.2 ECTS) per semester which consists of 100 minutes lectures (0.82 ECTS), 120 minutes structured activities (0.99 ECTS), and 120 minutes self-study per week for 14 weeks (0.99 ECTS), 100 minutes for each exam (0.12 ECTS), and 240 minutes for each exam preparation (0.28 ECTS).	
Credit points:	3.2 ECTS	
Pre-requisites course(s):	-	
Course Learning Outcomes (CLO):	<p>After taking this course the students have ability to:</p> <p>CLO1: Explain volcano definition CLO2: Explain magma CLO3: Identify form and structure of volcano CLO4: Describe volcano eruption CLO5: Explain rock volcano's concept CLO6: Explain Volcano and geothermal potency CLO7: Explain volcano mitigation hazard CLO8: Explain Paleo Volcano definition CLO9: Describe the method of volcano identification</p>	

	<p>CLO10: Explain Paleo Volcano in Indonesia</p> <p>CLO11: Analyse Krakatau as submarine volcano based on scientific data</p>															
Content:	Volcano definition and Volcano in Indonesia, Magma, Form and Volcano structure, Volcano Eruption, The rock of volcano, Volcano and geothermal, Volcano mitigation hazard, Paleo volcano, Identification volcano activities, Paleo volcano in Indonesia, Krakatau special case.															
Study/exam achievements:	<p>The final mark will be weight as follow:</p> <table border="1"> <thead> <tr> <th>No</th> <th>CLO</th> <th>Assessment Object</th> <th>Assessment Techniques</th> <th>Weight</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CLO1-CLO11</td> <td>Subject specific competence: a. Individual assignments b. Mid Exam c. Final Exam</td> <td>Written test Written test Written test</td> <td>30% 35% 35%</td> </tr> <tr> <td colspan="4">Total</td> <td>100%</td> </tr> </tbody> </table>	No	CLO	Assessment Object	Assessment Techniques	Weight	1	CLO1-CLO11	Subject specific competence: a. Individual assignments b. Mid Exam c. Final Exam	Written test Written test Written test	30% 35% 35%	Total				100%
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1	CLO1-CLO11	Subject specific competence: a. Individual assignments b. Mid Exam c. Final Exam	Written test Written test Written test	30% 35% 35%												
Total				100%												
Forms of media:	Board, LCD Projector, Laptop/Computer, stream video conference, relevant volcano documentary movie															
Literature:	<ol style="list-style-type: none"> Plummer, C.C., et al. (2016). <i>Physical Geology, 15th edition</i>. McGraw – Hill Education, New York. Holt, Rinehart and Winston. (2018). <i>Earth Science, Interactive Textbook</i>. A Harcourt Education Company, Austin. Rothery, D. (2015). <i>Geology Complete Introduction</i>. McGraw – Hill Companies, Inc. United Kingdom 															

PLO and CO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12
CLO1				√								
CLO2				√								
CLO3				√								
CLO4				√								
CLO5				√								
CLO6				√								
CLO7				√								
CLO8				√								
CLO9				√								
CLO10				√								
CLO11					√							