UNIVERSITAS NEGERI YOGYAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
DEPARTMENT OF MATHEMATICS EDUCATION
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Bachelor of Education in Mathematics **MODULE HANDBOOK**

Module name:	Philosophy of Mathematics Education
Module level, if applicable:	Undergraduate
Code:	PMA6218
Sub-heading, if applicable:	-
Classes, if applicable:	-
Semester:	7th
Module coordinator:	Marsigit, M.A., Dr., Prof.
Lecturer(s):	Marsigit, M.A., Dr., Prof.
Language:	Bahasa Indonesia
Classification within the curriculum:	Elective Course
Teaching format / class hours per week during the semester:	100 minutes lectures and 120 minutes structured activities per week.
Workload:	Total workload is 90,67 hours per semester which consists of 100 minutes lectures, 120 minutes structured activities, and 120 minutes self study per week for 16 weeks.
Credit points:	2
Prerequisites course(s):	-
Course outcomes:	The aim of the lesson is to facilitate the students of mathematics education to have experiences to learn and synthesize the theses and its anti-theses of the ontological, epistemological, and axiological aspects of mathematics and mathematics education.

	After taking this course the students have ability to: CO1. Understanding various ideology and nature of education CO2. Understanding the nature school of mathematics CO3. Understanding and implementing the moral value of math education CO4. Understanding and implementing the value of math education CO5. Understanding the nature of students, students ability and its implication CO6 Understanding the aim of mathematics education CO7 Understanding theory of learning, teaching, teaching learning resources and its implication CO8 Understanding the nature of assessment, society, curriculum and its implication CO9 Understanding the nature of students learn mathematics CO10 Understanding the nature of mathematical thinking
Content:	The lesson covers the indepth study of the nature, the method and the value of mathematics and mathematics education. The material objects the philosophy of mathematics consist of the history of mathematics, the foundation of mathematics, the concept of mathematics, the object of mathematics, the method of mathematics, the development of mathematics, the hierarchy of mathematics and the value of mathematics. The material objects of the philosophy of mathematics education consists of the ideology and the foundation of mathematics education as well as the nature, the method and the value of education, curriculum, educator, learner, aim of teaching, method of teaching, teaching facilities, teaching assessment.
Study/exam achievements:	Teaching learning activities of this lesson consists of the expositions by the lecture, classroom question and answer, sharing ideas, experiences, students' assignments, students' presentation, scientific papers, and browsing as well as developing internet website. The competences of the students cover their motivations, their attitudes, their knowledge, their skills and their experiences. These competencies are identified, assessed, and measured through their teaching learning activities, their assignments, their participations, the mid semester test, the final test and portfolios.

<table>
<tr><td></td><td>The final mark will be weight as follow:

<table>
<tr><th>No</th><th>CO</th><th>Assessment Object</th><th>Assessment Technique</th><th>Weight</th></tr>
<tr><td>1</td><td>CO2, CO3, CO4, and CO5</td><td>a. Individual assessment
b. Group assessment (including presentation or scientific paper)
c. Portofolio
d. Mid exam
e. Final exam</td><td>Written test</td><td>10%
20%
10%
30%
30%</td></tr>
<tr><td colspan="3"></td><td>Total</td><td>100%</td></tr>
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<tr><td>Forms of media:</td><td>Board, LCD Projector, Laptop/Computer, Internet Website</td></tr>
<tr><td>Literature:</td><td>....., 2009, Nature of the Students, Going to a public school, New South Wales, Department of Education and Training. Retrieved 2009 http://www.schools.nsw.edu.au/gotoschool/highschool/transitions/natureofstud/index.php

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Fullan, M., 2002, Leading and Learning for the 21stC Vol 1 No. 3 - January 2002

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PLO and CO Mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12
CO1						✓						
CO2					✓							
CO3						✓						
CO4						✓						
CO5					✓							
CO6						✓						
CO7									✓			
CO8											✓	
CO9					✓							
CO10					✓							