



# UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

Department of Mathematics

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## Doctor in Mathematics

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## MODULE HANDBOOK

Module Name	Topics in Applied Mathematics A
Module level, if applicable	Doctor
Code, if applicable	MMM-7308, MMM-7309
Subtitle, if applicable	-
Courses, if applicable	Topics in Applied Mathematics A, B
Semester(s) in which the module is taught	1 <sup>st</sup> or 2 <sup>nd</sup> semester
Person responsible for the module	Chair of the Applied Mathematics Research Group
Lecturer(s)	All Eligible Lecturers
Language	Bahasa Indonesia
Relation to curriculum	Elective course in the 1 <sup>st</sup> or 2 <sup>nd</sup> semester of doctor's degree
Teaching methods	Lecture, classroom discussion, flipped classroom, project.
Workload (incl. contact hours, self-study hours)	The total workload is 136 hours per semester, which consists of 150 minutes of lectures per week for 14 weeks, 180 minutes of structured activities per week, and 180 minutes of individual study per week, in total is 16 weeks per semester, including mid-exam and final exam.
Credit points	3
Required and recommended prerequisites for joining the module	Students have strong knowledge of mathematical concepts related to the topic of the lecture.

Module objectives/intended learning outcomes	After completing this course, the students should have the ability: CO 1 to combine one or more mathematical theories to solve problems in applied mathematics. CO 2 to use new methods to solve some problems in applied mathematics. CO 3 to conduct research in the field of Applied Mathematics.												
Content	<i>In this course, the students do some academic activities under the supervision of the lecturer(s). The academic activities are provided by the literature studies for mastering <b>mathematical theories or concepts</b>. <b>The topics and also the syllabus will be decided related to the research topics of the student.</b></i>												
Examination forms	Oral presentation, essay, portfolio, project.												
Study and examination requirements	The final mark will be weighted as follows: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">No</th> <th style="text-align: center;">Assessment methods (components, activities)</th> <th style="text-align: center;">Weight (percentage)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Final Examination (portfolio/essay/oral presentation)</td> <td style="text-align: center;">25%</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Mid-Term Examination (portfolio/essay/presentation)</td> <td style="text-align: center;">25%</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Other Activities: Project, Presentation, homework.</td> <td style="text-align: center;">50%</td> </tr> </tbody> </table> <p>To pass the course, the minimum grade is B.</p>	No	Assessment methods (components, activities)	Weight (percentage)	1	Final Examination (portfolio/essay/oral presentation)	25%	2	Mid-Term Examination (portfolio/essay/presentation)	25%	3	Other Activities: Project, Presentation, homework.	50%
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1	Final Examination (portfolio/essay/oral presentation)	25%											
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3	Other Activities: Project, Presentation, homework.	50%											
Media employed	Board, LCD Projector, Laptop/Computer												
Reading list	<b><i>The reading list will be announced by the lecturer at the first meeting.</i></b>												

### CO-PLO Mapping

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6
CO 1	v	v	v		v	v
CO 2	v	v		v	v	v
CO 3	v	v	v	v	v	v

Last Modified Date : 14 August 2022