



UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

Mathematics Department

Sekip Utara Bulaksumur Yogyakarta 55281 Telp: +62 274 552243 Fax: +62 274 555131 Email: math@ugm.ac.id Website: matematika.fmipa.ugm.ac.id

Doctoral Program in Mathematics

Telp : +62 274 552243

Email : maths3@ugm.ac.id;

Website : <http://math.fmipa.ugm.ac.id/dpmath>

MODULE HANDBOOK
Doctoral in Mathematics

Module name:	Capita Selecta in Applied Mathematics A/B/C																			
Module level, if applicable:	Doctoral Program																			
Code, if applicable:	MMM7311/MMM7312/MMM7313																			
Semester(s) in which the module is taught:	I (first year)																			
Person responsible for the module:	Dr. Fajar Adi Kusumo, M.Si.																			
Lecturer(s):	<i>All eligible lecturers</i>																			
Language:	Bahasa Indonesia																			
Relation to curriculum:	Doctoral Degree in Mathematics, Compulsory, 1 st and 2 nd semester																			
Credit points:	3																			
Type of teaching, contact hours:	3x50 minutes lectures, 3x50 minutes structured activities.																			
Workload:	<ul style="list-style-type: none"> • 3x50 minutes lectures, • 3x50 minutes structured activities, • 3x50 minutes individual study, • In 16 weeks per semester (including mid-term and final examinations). • Total: 144x50 minutes per semester. 																			
Requirements according to the examination regulations:	NONE																			
Recommended prerequisites:	Before taking this course, the students must have a good understanding the mathematical concept related to the topics.																			
Module objectives/intended learning outcomes:	<p>After completing this course, the students should have:</p> <ul style="list-style-type: none"> • CO 1. Ability to use the theories and concepts from other disciplines to solve the problems in applied mathematics. • CO 2. Ability to combine the theories in mathematics and the ones from other disciplines to solve the real problems. • CO 3. Ability to do research in applied mathematics. 																			
Content:	<p>In this course, the students do some academic activities under supervision by the lecturer(s). The academic activities are provided by the literature studies for understanding one or more <u>theories or concepts from other disciplines</u> (not mathematics theories).</p> <p><i>The topics and also the syllabus will be decided related to the research topics of the student.</i></p>																			
Study and examination requirements and forms of examination:	<p>The final mark will be weighted as follows:</p> <table border="1"> <thead> <tr> <th>No</th> <th>Assessment methods (components, activities)</th> <th>Weight (percentage)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Final Examination</td> <td>35%</td> </tr> <tr> <td>2</td> <td>Mid-Term Examination</td> <td>30%</td> </tr> <tr> <td>3</td> <td>Projects</td> <td>25%</td> </tr> <tr> <td>4</td> <td>Peer Assessment/Quiz</td> <td>10%</td> </tr> </tbody> </table> <p>Final grade will be determined as follows:</p> <p>Grade Criteria</p> <table border="1"> <tbody> <tr> <td>A</td> <td>$95 \leq \text{final mark} \leq 100$</td> </tr> <tr> <td>A-</td> <td>$90 \leq \text{final mark} < 95$</td> </tr> </tbody> </table>	No	Assessment methods (components, activities)	Weight (percentage)	1	Final Examination	35%	2	Mid-Term Examination	30%	3	Projects	25%	4	Peer Assessment/Quiz	10%	A	$95 \leq \text{final mark} \leq 100$	A-	$90 \leq \text{final mark} < 95$
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	A/B	$85 \leq \text{final mark} < 90$
	B+	$78 \leq \text{final mark} < 85$
	B	$70 \leq \text{final mark} < 78$
	B-	$65 \leq \text{final mark} < 70$
	B/C	$60 \leq \text{final mark} < 65$
	C+	$54 \leq \text{final mark} < 60$
	C	$48 \leq \text{final mark} < 54$
	C-	$40 \leq \text{final mark} < 48$
	C/D	$35 \leq \text{final mark} < 40$
	D+	$30 \leq \text{final mark} < 35$
	D	$25 \leq \text{final mark} < 30$
	E	< 25
Media employed:	White/Black Board, LCD Projector, Laptop/Computer	
Reading List:	<i>The reading list will be announced by the lecturer on the first meeting.</i>	

Mapping of The COs and PLOs

	PLO – 1 S2 Mat	PLO – 2 S2 Mat	PLO – 3 S2 Mat	PLO – 4 S2 Mat	PLO – 5 S2 Mat	PLO –6 S2 Mat
CO 1	√		√			
CO 2			√		√	√
CO 3	√		√		√	√