

## Module Handbook

Module Name:	Mathematics 1A
Module Level:	Bachelor
Abbreviation, if applicable:	MA 1101
Sub-heading, if applicable:	
Courses included in the module, if applicable:	
Semester/term:	first year
Module coordinator(s):	
Lecturer(s):	
Language:	Bahasa Indonesia
Classification within the curriculum:	General Studies / <del>Major Subject</del> / Elective Studies
Teaching format / class hours per week during the semester:	4 hours lectures, 2 hours tutorial
Workload:	4 hours lectures, 4 hours tutorial and structured activities, 4 hours individual study, 16 weeks per semester, and total 192 hours a semester
Credit Points:	4
Requirements:	-
Learning goals/competencies:	<p>After the course students hopefully have the following:</p> <p>Knowledge</p> <ul style="list-style-type: none"> <li>– Basic technical ability on the appropriate concepts, formulae, methods, and thinking</li> </ul> <p>Skills</p> <ul style="list-style-type: none"> <li>– Systematic, logical, and critical thinking; creative in solving calculus related problems</li> <li>– Ability to communicate their works and their thinking orally and in written papers.</li> </ul> <p>Competence</p> <ul style="list-style-type: none"> <li>– Readiness to learn other courses that need calculus as the prerequisite.</li> </ul>
Content:	This course gives rigorous understanding of some topics in calculus as one of the fundamental courses in mathematics to prepare the students in learning advanced topics. It covers functions and limit, derivatives and their applications, integrations and their applications, transcendental functions, and technique of integrations.
Study/exam achievements:	Students are considered to be competent and pass if at least get 50% of maximum mark of the exams, homework, and other assignments.
Forms of Media:	Slides and LCD projectors, blackboards
Literature:	<ol style="list-style-type: none"> <li>1. Thomas, <i>Calculus</i>, Pearson Education, 2010, 12<sup>th</sup> ed</li> <li>2. James Stewart, <i>Calculus</i>, Brooks/Cole Publishing Company, 1999, 4th ed.</li> <li>3. Dale Varberg, Edwin Purcel and Steve Rigdon, <i>Calculus</i>, Prentice Hall, 2007, 9th ed.</li> </ol>
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