UNIVERSITAS NEGERI YOGYAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
DEPARTMENT OF MATHEMATICS EDUCATION
Jalan Colombo Nomor 1 Yogyakarta 55281
Telepon: (0274) 565411 Pesawat 217, (0274) 565411 (TU); Fax. (0274) 548203
Laman: fmipa.uny.ac.id, E-mail: humas_fmipa@uny.ac.id

Bachelor of Education in Mathematics **MODULE HANDBOOK**

Module name:	Integral Calculus
Module level, if applicable:	Undergraduate
Code:	MAT6307
Sub-heading, if applicable:	-
Classes, if applicable:	-
Semester:	2nd
Module coordinator:	Dra. Endang Listyani, M.S
Lecturer(s):	Endang Listyani, MS.; Atmini Dhoruri, MS.; Ilham R, M.Sc
Language:	Bahasa Indonesia
Classification within the curriculum:	Compulsory course
Teaching format / class hours per week during the semester:	150 minutes lectures and 180 minutes structured activities per week.
Workload:	Total workload is 136 hours per semester which consists of 150 minutes lectures, 180 minutes structured activities, and 180 minutes self-study per week for 16 weeks.
Credit points:	3
Prerequisites course(s):	Differential Calculus (MAT6302)
course outcomes:	After taking this course the students have ability to: CO1. Demonstrate collaborative attitude and independence to do individual or group assigntments CO2. Communicate ideas in solving mathematical problems related to Integral in writing or verbally CO3. Explain the Integral concept mathematically CO4. Solve problems using Integral concept CO5. Develop media related to Integral based on ICT

<table>
<tr><td>Content:</td><td>The course contains discussion on Indefinite integral, definite integral, fundamental theorem of integral, applications of the integral, transcendent function, integration techniques, indeterminate forms, and improper integrals.
.</td></tr>
<tr><td>Study / exam achievements:</td><td>Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude. The student is given a value of very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not a component of the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude.
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>CO 2</td><td>Presentation</td><td>Observation</td><td>10%</td></tr>
<tr><td>2</td><td>CO 3,
CO 4,</td><td>a. Individual assessment
b. Group assessment
c. Quiz
d. Mid exam
e. Final exam</td><td>Written test</td><td>10%
10%
20%
20%
25%</td></tr>
<tr><td>3</td><td>CO 5</td><td>Media</td><td>Observation</td><td>5%</td></tr>
<tr><td colspan="3"></td><td>Total</td><td>100%</td></tr>
</table></td></tr>
<tr><td>Forms of media:</td><td>Board, LCD Projector, Laptop/Computer</td></tr>
<tr><td>Literature:</td><td>1. Varberg Dale dan Purcell E.J. (2001). Kalkulus Jilid 1 (Edisi VII), Batam: Interaksa Morrill, W.K. 1969. Analytic Geometry. Scranton, Pennsylvania : International textbook Company.
2. Stroud, K.A. Engineering mathematics; with addition by Dexter J. Booth. -5th ed.
3. Leithold (2002) Kalkulus jilid 1, Jakarta: Erlangga.</td></tr>
</table>

PLO and CO Mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11	PLO12
CO1		✓										
CO2			✓									
CO3					✓							
CO4							✓					
CO5									✓			