<table>
<tr><td>Module designation</td><td>Integral Calculus
Indonesian title: Kalkulus Integral
Course code: 8420203084</td></tr>
<tr><td>Semester(s) in which the module is taught</td><td>Semester 2 (First year)</td></tr>
<tr><td>Person responsible for the module</td><td>Coordinator: Dr. Abdul Haris Rosyidi, M.Pd
Teaching staff: Prof. Dr. Masriyah, M.Pd; Dr. Abdul Haris Rosyidi, M.Pd; Rudianto Artiono, S.Pd, M.Si; Ika Kurniasari, M.Pd; Novita Vindri Harini, M.Pd</td></tr>
<tr><td>Language</td><td>Indonesian</td></tr>
<tr><td>Relation to curriculum</td><td>Compulsory</td></tr>
<tr><td>Teaching methods</td><td>Lectures, tutorial assignments, and individual study
Media and tools: Slides and LCD projectors, whiteboard</td></tr>
<tr><td>Workload (incl. contact hours, self-study hours)</td><td>(Estimated) total workload: 3 CU × 170 minutes × 16 weeks = 8,160 minutes = 136.00 hours (≈ 4.77 ECTS)
Contact hours: lectures, 3 × 50 minutes per week × 16 weeks = 40.00 hours (class hours per week: 510 minutes = 8.50 hours, including structured activities)
Private study including examination preparation: structured assignments, 3 × 60 minutes per week × 16 weeks = 48.00 hours; independent study, 3 × 60 minutes per week × 16 weeks = 48.00 hours (total 96.00 hours)</td></tr>
<tr><td>Credit points</td><td>3 CU (4.77 ECTS)
1 CU = 170 minutes per week × 16 weeks = 45.3 hours; 1 ECTS = 28.48 hours (144 CU = 229 ECTS), so 1 CU = 1.59 ECTS (UNESA Rector's Decree No. 736/HK/KM/2023).</td></tr>
<tr><td>Required and recommended prerequisites for joining the module</td><td>Differential Calculus Kalkulus Diferensial</td></tr>
<tr><td>Module objectives/intended learning outcomes</td><td>Programme learning outcomes (PLO) addressed:
PLO-5: Apply the basic principles of mathematics to solve simple mathematical problems.
PLO-6: Demonstrate mathematical knowledge and insight.</td></tr>
<tr><td>Content</td><td>Studying indefinite integrals, definite integrals, applications of integrals in calculating the area and volume of solids of revolution, and solving simple differential equations using integration.</td></tr>
<tr><td>Examination forms</td><td>Final score is calculated from the weekly assessment scheme below (CLO/PLO addressed and weight of each assessment):
<table>
<tr><th>Week</th><th>CLO</th><th>PLO</th><th>Weight (%)</th></tr>
<tr><td>1</td><td>CLO-1</td><td>PLO-6</td><td>3</td></tr>
<tr><td>2</td><td>CLO-1</td><td>PLO-5</td><td>3</td></tr>
<tr><td>3</td><td>CLO-1</td><td>PLO-5</td><td>5</td></tr>
<tr><td>4</td><td>CLO-1</td><td>PLO-5</td><td>5</td></tr>
<tr><td>5</td><td>CLO-2</td><td>PLO-5</td><td>4</td></tr>
<tr><td>6</td><td>CLO-2</td><td>PLO-5</td><td>3</td></tr>
<tr><td>7</td><td>CLO-2</td><td>PLO-6</td><td>3</td></tr>
<tr><td>8</td><td>CLO-2</td><td>PLO-6</td><td>20</td></tr>
<tr><td>9</td><td>CLO-1</td><td>PLO-6</td><td>3</td></tr>
</table></td></tr>
</table>

10	CLO-3	PLO-6	3
11	CLO-2	PLO-6	3
12	CLO-3	PLO-6	3
13	CLO-1	PLO-6	4
14	CLO-3	PLO-5	4
15	CLO-3	PLO-5	4
16	CLO-3	PLO-5	30

Study and examination requirements

Students are considered competent and pass if the final score is at least 55 or C.

Final index (grade conversion):

Index	Converted score	Score range (A = final score)
A	4.00	85 ≤ A ≤ 100
A-	3.75	80 ≤ A < 85
B+	3.50	75 ≤ A < 80
B	3.00	70 ≤ A < 75
B-	2.75	65 ≤ A < 70
C+	2.50	60 ≤ A < 65
C	2.00	55 ≤ A < 60
D	1.00	40 ≤ A < 55
E	0.00	0 ≤ A < 40

Reading list

1. Thomas Jr., G. B., Hass, J., Heil C., & Weir, M.D., et.al. 2018. Thomas, Calculus 14th Edition (Revised) . Boston: Pearson
2. Purcell, E.J., Varberg, D., and Rigdon, S.E. 2007 . Calculus 9th Edition . Ontario: Pearson, Prentice Hall
3. Stewart, J. 2020. Calculus: Early Transcendental 9th Edition. Boston: Cengage Learning
4. Adams, R. A. 2017. Calculus: A Complete Course, 9th Edition. Ontario: Pearson
5. Abadi & Wintarti, A. 2014 (in press). Kalkulus, Buku 1. Surabaya
6. Moesono, D. 1994. Kalkulus I (Edisi Revisi). Surabaya: University Press Surabaya