MODULE HANDBOOK

<table>
<tr><td colspan="2">Module name</td><td colspan="4">Multivariable Calculus</td></tr>
<tr><td colspan="2">Module level, if applicable</td><td colspan="4">2nd year</td></tr>
<tr><td colspan="2">Code, if applicable</td><td colspan="4">SST-301</td></tr>
<tr><td colspan="2">Semester(s) in which the module is taught</td><td colspan="4">3rd (third)</td></tr>
<tr><td colspan="2">Person responsible for the module</td><td colspan="4">Dina Tri Utari, S.Si., M.Sc.</td></tr>
<tr><td colspan="2">Lecturer</td><td colspan="4">Ayundyah Kesumawati, S.Si., M.Si.
Muhammad Hassan Sidiq K., M.Sc.</td></tr>
<tr><td colspan="2">Language</td><td colspan="4">Bahasa Indonesia</td></tr>
<tr><td colspan="2">Relation to curriculum</td><td colspan="4">Compulsory course in the third year (3rd semester) Bachelor Degree</td></tr>
<tr><td>Types of teaching and learning</td><td>Class size</td><td>Attendance time (hours per week per semester)</td><td>Form of active participation</td><td colspan="2">Workload (hours per semester)</td></tr>
<tr><td rowspan="4">Lecture</td><td rowspan="4">50-60</td><td rowspan="4">2.5</td><td rowspan="4">Problem solving</td><td>Face to face teaching</td><td>35</td></tr>
<tr><td>Structured activities</td><td>48</td></tr>
<tr><td>Independent study</td><td>48</td></tr>
<tr><td>Exam</td><td>3.33</td></tr>
<tr><td colspan="2">Total Workload</td><td colspan="4">136 hours</td></tr>
<tr><td colspan="2">Credit points</td><td colspan="4">3 CUs / 5.01 ECTS</td></tr>
<tr><td colspan="2">Requirements according to the examination regulations</td><td colspan="4">Minimum attendance at lectures is 75%. Final score is evaluated based on quiz, assignment, mid-term exam, and final exam</td></tr>
<tr><td colspan="2">Recommended prerequisites</td><td colspan="4">Students have taken Calculus II (SST – 203)</td></tr>
<tr><td colspan="2">Related course</td><td colspan="4">Calculus II (SST – 203)</td></tr>
<tr><td colspan="2">Module objectives/intended learning outcomes</td><td colspan="4">After completing this course, the students have ability to:
CO 1. describes the history of the development of calculus among Islamic scientists, Domain and graphs of two variable functions using online software
CO 2. explain partial derivatives, limits and continuity of the function of two or more variables,
CO 3. explain the derivative of two or more variables
CO 4. explain the concept of the integral function of two variables
CO 5. explain the application of multivariable calculus in the field of statistics</td></tr>
<tr><td colspan="2">Content</td><td colspan="4">After completing this course, the students have ability to understand:
1. Multivariable Function
2. Derivative Multivariable Function
3. Integral Multivariable Function
4. Improper Integral
5. Infinite Series</td></tr>
<tr><td colspan="2">Study and examination requirements and forms of examination</td><td colspan="4">The final mark will be weighted as follows:
No | Assessment components | Assessment types | Weight (percentage)
1 | CO 1 | Quiz | 20%
2 | CO 2 | Quiz | 20%
3 | CO 3 | Assignment | 20%
4 | CO 4 | Mid-term exam | 20%
5 | CO 5 | Final exam | 20%</td></tr>
<tr><td colspan="2">Media employed</td><td colspan="4">Google Classroom, relevant websites, slides (power points), video, interactive media, white-board, laptop, LCD projector</td></tr>
<tr><td colspan="2">Reading list</td><td colspan="4">1. Purcell, E. J & D. Vanberg, 1999 Terjemahan, Kalkulus dan Geometri Analitis, Jilid 1 dan 2,</td></tr>
</table>

	2. Spiegel. M. & Wrede R.C. 2002. Theory and Problem of Advanced Calculus. Schaum Outline Series. Mc Graw-Hill 3. Purcell, E. J & D. Vanberg, 2003. Terjemahan, Kalkulus , Jilid 2 Jakarta : Erlangga

Mapping CO, PLO, and ASIIN's SSC

ASIIN		PLO											
		E	N	T	H	U	S	I	A	S	T	I	C
Knowledge	a							CO1					
	b												
	c												
	d							CO2 CO3					
Ability	e												
	f												
Competency	g							CO4 CO5					
	h												
	i												
	j												
	k												
	l												