MODULE HANDBOOK

<table>
<tr><td colspan="2">Module name</td><td colspan="5">Geostatistics II</td></tr>
<tr><td colspan="2">Module level, if applicable</td><td colspan="5">3rd year</td></tr>
<tr><td colspan="2">Code, if applicable</td><td colspan="5">SST-609</td></tr>
<tr><td colspan="2">Semester(s) in which the module is taught</td><td colspan="5">6th (Sixth)</td></tr>
<tr><td colspan="2">Person responsible for the module</td><td colspan="5">Achmad Fauzan, S.Pd., M.Si.</td></tr>
<tr><td colspan="2">Lecturer</td><td colspan="5">Tuti Purwaningsih, S.Stat., M.Si.
Achmad Fauzan, S.Pd., M.Si.</td></tr>
<tr><td colspan="2">Language</td><td colspan="5">Bahasa Indonesia</td></tr>
<tr><td colspan="2">Relation to curriculum</td><td colspan="5">Compulsory courses of scientific interest in the third year (3rd semester) Bachelor Degree</td></tr>
<tr><td colspan="2">Type of teaching, contact hours</td><td colspan="5">150 minutes lectures and 180 minutes structured activities per week.</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><td></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>5</td></tr>
<tr><td colspan="2">Total Workload</td><td colspan="5">136 hours</td></tr>
<tr><td colspan="2">Credit points</td><td colspan="5">3 CUs / 5.1 ECTS</td></tr>
<tr><td colspan="2">Requirements according to the examination regulations</td><td colspan="5">Minimum attendance at lectures is 75%. Final score is evaluated based on quiz, mid-term exam, and final exam.</td></tr>
<tr><td colspan="2">Recommended prerequisites</td><td colspan="5">Students have taken Geographic Information System II (SST-403).</td></tr>
<tr><td colspan="2">Related course</td><td colspan="5">Geostatistics I (SST-509)</td></tr>
<tr><td colspan="2">Module objectives/intended learning outcomes</td><td colspan="5">After completing this course, the students have ability to:
CO 1. able to explain the Spatial Spatial Error Model (SEM)
CO 2. able to explain the Generalized Spatial Model (GSM)
CO 3. able to explain Geographically
Weighted Regression (GWR)
CO4. master the GIS web application
CO5. able to perform spatial data analysis and interpret it</td></tr>
<tr><td colspan="2">Content</td><td colspan="5">Spatial Error Model (SEM)
Generalized Spatial Model (GSM)
Geographically Weighted Regression (GWR)
GIS web application</td></tr>
<tr><td colspan="2">Study and examination requirements and forms of examination</td><td colspan="5">The final mark will be weighted as follows:
No | Assessment components | Assessment types | Weight (percentage)
1 | CO 1 | Assignment, Midterm Exam | 20%
2 | CO 2 | Assignment, Midterm Exam | 20%
3 | CO 3 | Assignment, Final Exam | 20%
4 | CO 4 | Assignment, Final Exam | 20%
5 | CO 5 | Assignment, Final Exam | 20%</td></tr>
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Media employed	Google Classroom, relevant websites, slides (power points), video, interactive media, white-board, laptop, LCD projector
Reading list	1. Spatial Statistics oleh Brian D. Ripley. 1952. John Wiley & Sons 2. Anselin L. 2009. Spatial Regression. Fotheringham AS, PA Rogerson, editor, Handbook of Spatial Analysis. London: Sage Publications. 3. Baltagi BH. 2005. Econometrics Analysis of Panel Data. Ed ke-3. England: John Wiley and Sons, LTD. 4. Elhorst JP. 2010. Spatial Panel Data Models. Fischer MM, A Getis, editor, Handbook of Applied Spatial Analysis. New York: Springer. 5. Fotheringham A.S., Brunsdon C., Chartlon M. 2002. Geographically Weighted Regression, the analysis of spatially varying relationships, John Wiley and Sons, LTD. 6. Fotheringham AS, Rogerson PA. 2009. Spatial Analysis. London: Sage Publications, Inc. 7. Lee LF, Yu J. 2009. Some recent developments in spatial panel data models. Regional Science and Urban Economics: REGEC-02729; No of Pages 17 8. Oliver Schabenberger, Carol A. Gotway. 2005. Statistical methods for spatial data analysis. Chapman & Hall/CRC.

Mapping CO, PLO, and ASIIN's SSC

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