CP234424 - Location and Spatial Analysis

Module Name	Location and Spatial Analysis
Module level, if applicable	Intermediate BoURP
Code, if applicable	CP234424
Subtitle, if applicable	-
Course, if applicable	Location and Spatial Analysis
Semester(s) in which the module istaught	4th Semester
Person responsible for the module	Vely Kukinul Siswanto, ST, MT
Lecturer	Dr. Ir. Eko Budi Santoso, Lic.rer.reg. Arwi Yudhi Koswara, S.T., M.T. Surya Hadi Kusuma, S.T., M.T. Fendy Firmansyah, S.T., M.T. Vely Kukinul Siswanto, ST, MT Rivan Aji Wahyu Dyan Syafitri, ST, MT
Language	Indonesian, English
Relation to curriculum	Compulsory Courses for undergraduate program in Urban and Regional Planning
Type of teaching, contact hours	Lecture (Face to face lecture) 1.5 hours x 14 weeks per semester M1: Group discussion M3: Case study M6: Project-based learning
Workload	Regular (3 SKS) Class: 2.5 hours x 14 weeks = 35 hours Structured activities: 4 hours x 14 weeks = 56 hours Independent Study: 3 hours x 14 weeks = 42 hours Exam: 1.5 hours x 4 time = 6 hours Total = 133 hours
Credit points	3 SKS ~ 4.8 ECTS
Requirements according to theexamination regulations	Registered in this course. Minimum 80% attendance in this course
Recommended prerequisites	-
Module objectives/intended	**General knowledge:** 1. Students are able to understand the theoretical concepts of

<table>
<tr><td>learning outcomes</td><td>regional and urban planning in aspects of urban studies, regional studies, coastal studies, spatial science, planning science, data science, built environment design, infrastructure and transportation systems, environmental management, social systems, economics, management studies, and research / projects.
2. Students are able to understand spatial and non-spatial planning methods in decision making in the field of regional and urban planning.
3. Students are able to understand the techniques and processes of regional and urban planning qualitatively, quantitatively, and spatial modelling (geographic information systems) and presentation techniques.
4. Students are able to apply plan formulation techniques and compile alternative spatial / spatial models through qualitative and quantitative approaches in the form of scenarios for setting spatial patterns and spatial structures of cities, regions, coasts.

Specific knowledge:
1. Students are able to explain the basic principles and concepts of spatial aspects in determining activities.
2. Students are able to explain the understanding of location theory and its position in regional and urban planning.
3. Students are able to analyze the location of several components of city and regional activities such as residential, governmental, industrial, commercial, social and economic facilities.
4. Students are mastering the techniques and processes of regional and urban planning qualitatively, quantitatively, spatial modeling (geographic information systems) and presentation techniques.</td></tr>
<tr><td>Content</td><td>1. Location definition and its implications, the scope of location and spatial analysis.
2. Basic factors in determining location, problems in determining location.
3. Classic location theory of Von Thunen, Weber, Losch, Christaller, Hotelling.
4. Basic Location Analysis of industrial, commercial, and general facility services activity.
5. Spatial interaction analysis.</td></tr>
<tr><td>Study and examination requirements and forms of examination</td><td>4 assessments:

<table>
<tr><th>Evaluation</th><th>Method</th><th>Weight</th></tr>
<tr><td rowspan="2">1</td><td>Weekly presentation</td><td>10%</td></tr>
<tr><td>Individual Performance</td><td>10%</td></tr>
<tr><td>2</td><td>Midterm Exam</td><td>30%</td></tr>
<tr><td rowspan="2">3</td><td>Final Group Task (Paper and presentation)</td><td>20%</td></tr>
<tr><td>Individual Performance</td><td>10%</td></tr>
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	<table><tr><td>**4**</td><td>**Critical Review**</td><td>**20%**</td></tr></table> ***1. Evaluation I – week 2-14*** ***2. Evaluation II (exam) – week 7*** ***3. Evaluation III – week 16*** ***4. Evaluation IV – week 16***
Media employed	Classical teaching tools with white board and power point presentation, audiovisual, zoom meeting, ITS online classroom, Arcgis, Sketchup, and Microsoft Excel.
Reading list	**Main References:** 1. Adisasmita, Rahardjo. 2008. Pengembangan Wilayah: Konsep dan Teori. Edisi 1. Graha Ilmu. Yogyakarta **Supporting References:** 1. Bendavid-Val, Avrom. 1991. Regional and Local Economic Analysis for Practitioners. Praeger Publishers. New York. 2. Chan, Yupo. 2011. Location Theory and Decision Analysis: Analytics of Spatial Information Technology. Springer. New York. 3. Djojodipuro, Marsudi. 1992. Teori lokasi. Lembaga Penelitian FE UI. Jakarta. 4. Eiselt, G.A. Vladimir Marianov, Eds. 2011. Foundations of Location Analysis. Springer. New York. 5. Robinson, Tarigan. 2005. Ekonomi Regional: Teori Dan Aplikasi. Edisi Revisi. PT. Bumi Aksara. Jakarta. 6. Rushton, Gerard 1973. Optimal location of Facilities. Compress. Iowa. 7. Rustiadi, Ernan dkk. 2009. Perencanaan dan Pengembangan Wilayah. Crestpent Press dan Yayasan Obor Indonesia. Jakarta 8. Stefan Nickel, Justo Puerto. 2005. Location Theory: A Unified Approach. Springer Verlag. Berlin. 9. Wibowo, Rudi, & Soetriono, 2004. Konsep, Teori, dan Landasan Analisis Wilayah. Edisi Pertama. Bayumedia Publishing. Malang. Jawa