## CP234106 – Planning Communication and Computation

Module Name	Presentation Planning Technique/Planning Computation		
Module level, if applicable	Basic BoURP		
Code, if applicable	CP234106		
Subtitle, if applicable	-		
Course, if applicable	Planning Communication and Computation		
Semester(s) in which the module istaught	1 <sup>st</sup> Semester		
Person responsible for the module	Hertiari Idajati		
Lecturer	Rivan Aji Wahyu Dyan Syafitri		
Language	Indonesian, English		
Relation to curriculum	Compulsory Courses for undergraduate program in Urban and Regional Planning		
Type of teaching, contact hours	<ul> <li>M1: Grup discussion</li> <li>M2: Simulation</li> <li>M4: Collaborative learning</li> <li>M6: Project-based learning</li> <li>2.83 hours x 14 weeks = 40 hours</li> </ul>		
Workload	Regular (4 SKS) Class: 2.83 hours x 14 weeks = 40 hours Structured activities: 6 hours x 14 weeks = 84 hours Independent Study: 2.83 hours x 14 weeks = 40 hours Exam: 5 hours x 4 weeks = 20 hours Total = 184 hours		
Credit points	4 SKS ~ 6,4 ECTS		
Requirements according to the examination regulations Recommended prerequisites	Registered in this course Minimum 80% attendance in this course -		
Module objectives/intended learning outcomes	<ul> <li>General knowledge:</li> <li>1. Able to understand spatial and non-spatial planning methods in decision making in the field of urban and regional planning</li> <li>2. Able to understand techniques and processes of urban and regional planning qualitatively, quantitatively, and spatial modeling (geographical information systems) and presentation techniques</li> <li>Specific knowledge:</li> </ul>		

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	1.	Students are able to apply effective and informative communication
	2.	Students are able to introduce themselves and planning
	2.	products
	3.	Students are able to visualize planning products in the
	•••	form of diagrams and graphs
	4.	Students are able to visualize product planning in the
		form of an online dashboard
	5.	Students are able to make presentation material for a
		planning product and make presentations
	6.	Students are able to apply GIS software (basic mapping)
		in making planning products
	7.	Students are able to manage planning databases using
	-	SQL (Structured Query Language)
	8.	Students are able to apply spatial data science using
	0	python in planning Students are able to early 2D model software in making
	9.	Students are able to apply 3D model software in making planning products
Content	1.	Basic and practical Communication techniques in PWK
content	1.	(oral and written)
	2.	
		increase self-confidence and build a persona
	3.	Basic and supporting tools for multimedia visualization
		visual communication in product planning
	4.	Basic and supporting tools for graphic design media
		both offline and online in planning products
	5.	Descriptive and numeric data visualization practice
		using tableau/powerBI
	6.	The practice of creating a web-based dashboard
	7	visualization using tableau/powerBl
	7.	Basic planning and technical aspects in percentages (top down and bottom up planning)
	8	Basic presentation techniques and practice
		Basic mapping and map types
		. Introduction to coordinate systems, projections and
	_	datums
	11	. Practice creating and positioning spatial data in the
		form of vectors (points, polygons, polylines) using
		ArcGIS/QGIS
	12.	. Basic filter analysis using Structure Query Language
	13.	. Basic understanding of the conversion of descriptive
		and numerical data into spatial data
	14.	Filter analysis practice using SQL and attribute
		management (spatial join, join n relay) using
	1 -	VSCode/Jupyter Notebook/ArcGIS/QGIS
		<ul> <li>Understanding of overlay analysis on vector data</li> <li>Practice overlay analysis on vector data (union, update,</li> </ul>
	10.	intersect, erase, dissolved) using ArcGIS/QGIS
	17	. Basic symbology settings according to cartographic
	L	rules (categorization, colors, icons, labels, legends, etc.)
	18	. Introduction to map layout elements (RTRW, RDTR,
	1 10.	

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		VP, Research Maps)				
	19. Practice creating map layouts using symbology			• ·		
	according to cartographic rules using ArcGIS/QGIS					
	20. Basic introduction to spatial data science					
		tial data science meth				
	22. Practice using functions and loops in Python using					
		upyter Notebook				
		ion to libraries in pyt				
		eading spatial data u	•	•		
		(geopandas) in Python using VSCode/Jupyter Notebook				
		modeling for planning	-			
		oduction to the City I				
		ice of creating 3D urb	-	odels and		
		ng SketchUp/Blender				
		ion to VR and AR				
		endering 3D urban m		ages,		
	animations and VR using Enscape					
Study and examination	4 assessments:					
requirements and forms of		Ι	I			
examination	Evaluation	Method	Weight			
	1	Simulation of	20%			
		Communication				
		and Presentation				
		Techniques				
	2	Practicum	40%			
	3	Quiz	15%			
	4	Planning Product	25%			
		Presentation				
	1. Simulation of Communication and Presentation					
	Techniques – week 6					
	2. Practicum – between week 3 and week 14					
	3. Quiz – week 15					
		Product Presentation				
Media employed		hing tools with white				
		ation, audiovisual, zo	om meeting,	i i s online		
Dooding list	classroom.					
Reading list	Main referend					
	• •	R. (2022). The art of o				
		g your fundamental c & Littlefield	communicatio	JII SKIIIS.		
			ning Tablaau	2022.		
	-	oshua N. (2022). Lear fective data visualiza	-			
		alytics, and improve y	-			
		es, 5th edition. Packt		ytening		
		ti N I. (2020). Buku aj	-	sentasi		
		ampil memukau saat				
		g. Perpustakaan Nasi	•			
		H. (2023). Mastering		AcGraw Hill		
		, P. (2023). Understa				
		) le Development Goa	-	-		
	JUSIDIUD	ne development dud	na. Case atuu	C3 WILLI		

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	QGIS. CRC Press.
6	
	Analysis. " O'Reilly Media, Inc.".
7	. Beaulieu A (2020). Learning SQL: Master SQL
	Fundamentals. " O'Reilly Media, Inc.".
8	. Billen R (2021). 3D City Models and Urban Information:
	Current Issues and Perspectives European COST Action
	TU0801. EDP Sciences
	upporting reference:
1	
	Tips to sell yourself and stand out from the crowd. 50
	minutes.com
2	
3	
	https://www.qgistutorials.com/en/ (akses 27 Januari
	2023)
4	•
	https://www.qgistutorials.com/en/ (akses 27 Januari
	2023)
5	
	Big Ideas about Applying the Science of Where. Esri
	Press.
6	. ArcGIS Tutorials:
	https://desktop.arcgis.com/en/arcmap/latest/get-
	started/introduction/arcgis-tutorials.htm (akses 27
	Januari 2023)
7	. ArcGIS Pro Quick Start Tutorials:
	https://pro.arcgis.com/en/pro-app/latest/get-
	started/pro-quickstart-tutorials.htm (akses 27 Januari
	2023)
8	•
	(akses 27 Januari 2023)
9	
	essential tools for working with data. O'reilly
	0. Learn Tableau: https://www.tableau.com/learn (akses
	27 Januari 2023)
	1. Courses Sketchup:
	•
	https://learn.sketchup.com/collections (akses 27
	Januari 2023)
1	2. Tutorial Blender:
	https://www.blender.org/support/tutorials/ (akses 27
	Januari 2023)
1	3. SQL Tutorial: https://www.w3schools.com/sql/ (akses
	27 Januari 2023)
1	4. Pembuatan Geometrik Jalan: https://streetmix.net
	(akses 27 Januari 2023)