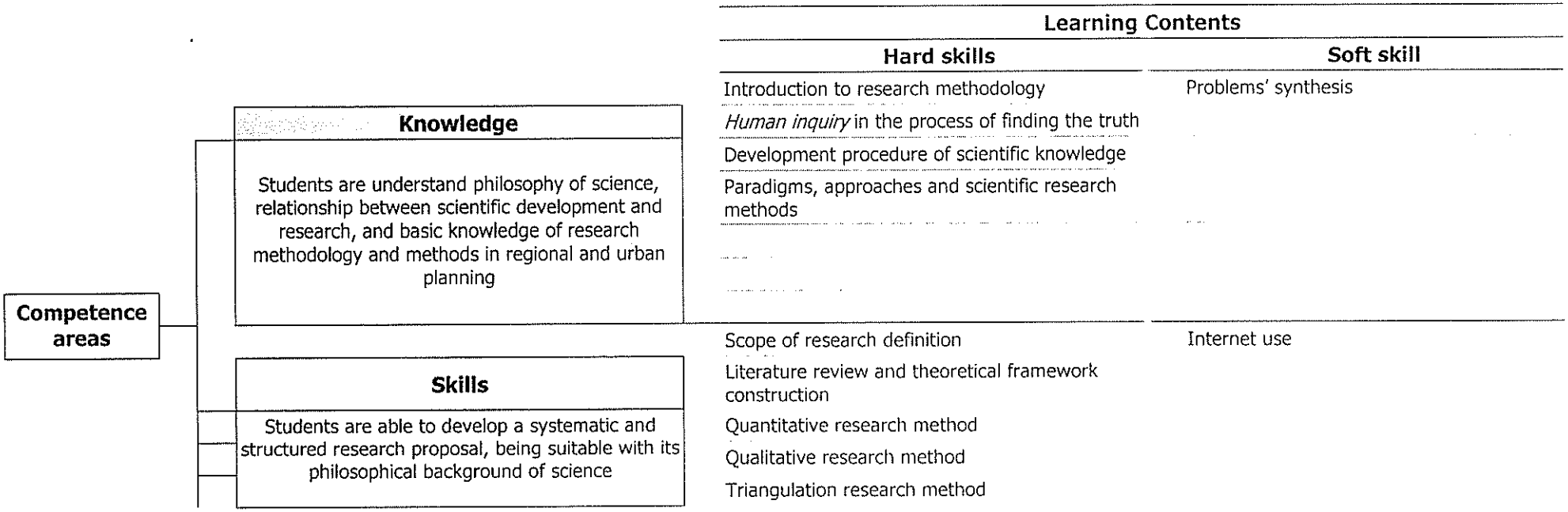
SAP / GBPP
(Bahasa Inggris)
JURUSAN PERENCANAAN WILAYAH DAN KOTA
TAHUN 2007

FAKULTAS TEKNIK
UNIVERSITAS DIPONEGORO
SEMARANG

Course Syllabus

Course Name	:	Research Methodology
Code/Credit/Semester	:	TKP 403/3 sks/VII
Coordinator	:	Dr. Imam Buchori
Lecturers	:	Dr. Joesron Alie Syahbana Landung Esariti
Course Description	:	This course discusses philosophy of science, relationship between scientific development and research, and basic knowledge of research methodology and methods, used as the basic foundation to answer for various problems, particularly those in the field of regional and urban planning
Course structure (%)		
Theory	:	60%
Studio/practical works	:	30%
Field works	:	10%

Course Competenses



	Data compilation technique	
	Sampling technique	
	Research design	Proposal development
Behaviour	Research organization	Seminar
Students have ability to identify urban and regional problems in practice and to formulate them scientifically		

Learning Plan

Course Name : Research Methodology
Code/Credit/Semester : TKP 403/3 sks/VII
Coordinator : Dr. Imam Buchori
Lecturers : Dr. Joesron Alie Syahbana
Landung Esariti
Course Description : This course discusses philosophy of science, relationship between scientific development and research, and basic knowledge of research methodology and methods, used as the basic foundation to answer for various problems, particularly those in the field of regional and urban planning

Week	Content	Learning Method	Learning outcome	Assessment criteria	Weight
1.	Introduction to research methodology	Class discussion	To understand the scope of research of urban and regional planning	Accuracy and suitability in developing research problem in the field of urban and regional planning	30%
2.	*Human inquiry* in the process of finding the truth *Small task: artikel review taken from international journal*	Class discussion	To understand the process of finding the truth		
3.	Development procedure of scientific knowledge *Task: topic of thesis proposal*	Class discussion	To distinguish the procedures of scientific knowledge development: inductive and deductive		
4.	Paradigms, approaches and scientific research methods	Class discussion	To distinguish research paradigms, approaches, and methods		
5.	Collecting the small task Discussing topic of thesis and major task and determining thesis' supervisor	Studio	To select a topic of thesis research		
6.	Research design and justification	Class discussion	To argue in selecting the suitable research paradigm and research approach due to the topic selected	Accuracy in selecting and justifying research topic and research method	70%
7.	Scope of research definition	Class discussion and practice	To identify scope of research, both spatial scope and substance	Ketepatan dan kedetailan dalam menentukan ruang lingkup penelitian	

8.	Literature review and theoretical framework construction	Class discussion and practice	To review literatures and to develop theoretical framework	Critical level in formulating result of literature review
9.	Quantitative research method	Class discussion and practice	To design a research using quantitative method	Accuracy in selecting research method due to the selected topic
10.	Qualitative research method	Class discussion and practice	To design a research using qualitative method	
11.	Triangulation research method	Class discussion and practice	To design a research using triangulation method	
12.	Data compilation technique	Class discussion and practice	To design data collection technique due to the selected topic and research method	Accuracy in selecting data collection technique due to the selected topic
13.	Sampling technique	Class discussion and practice	To design sampling technique due to the selected topic and research method	Accuracy in selecting sampling technique due to the selected topic
14.	Research organization	Class discussion and practice	To design research organization due to the selected topic and research method	Completeness in designing research organization
15.	Consultation and discussion of the thesis proposal	Respond and presentation		
16.	Seminar of the thesis proposal	Presentation and disscussion	To dispute her/his proposal	

LITERATURES

1. Babbie, E. 1986. ***The Practice of Social Research***. 4th Edition. Belmont: Wadsworth Publishing.
2. Brannen, J. (ed). 2002. ***Memadu Metode Penelitian Kualitatif dan Kuantitatif***. Terjemahan oleh N.A. Kurde dkk. Yogyakarta: Pustaka Pelajar.
3. Brewer, J. and A. Hunter. 1989. ***Multimethod Research: A Synthesis of Styles***. Newbury Park: Sage Publications.
4. Bungin, B. (ed). 2003. ***Analisis Data Penelitian Kualitatif: Pemahaman Filosofis dan Metodologis ke Arah Penguasaan Model Aplikasi***. Jakarta: PT RajaGrafindo Persada.
5. Creswell, J.W. 1994. ***Research Design: Qualitative and Quantitative Approaches***. Thousand Oaks: Sage Publications.
6. Danim, S. 2002. ***Menjadi Peneliti Kualitatif***. Bandung: Pustaka Setia.
7. Denzin, N.K. and Y.S. Lincoln (eds). 1994. ***Handbook of Qualitative Research***. Thousand Oaks: Sage Publications.

8. Moleong, L.J. 1998. ***Metodologi Penelitian Kualitatif***. Bandung: PT. Remaja Rosdakarya.
9. Muhadjir, N. 2002. ***Metodologi Penelitian Kualitatif***. Edisi IV. Yogyakarta: Rake Sarasin.
10. Muhadjir, N. 2001. ***Filsafat Ilmu: Positivisme, PostPositivisme dan PostModernisme***. Edisi II. Yogyakarta: Rake Sarasin.
11. Nasution, S. 1996. ***Metode Penelitian Naturalistik Kualitatif***. Bandung: Tarsito.
12. Patton, M.Q. 1990. ***Qualitative Evaluation and Research Methods***. 2nd Edition. Newbury Park: Sage Publications.
13. Smith, H.W. 1991. ***Strategies of Social Research***. 3rd Edition. Orlando: Holt, Rinehart and Winston, Inc.
14. Suriasumantri, J.S. 1990. ***Filsafat Ilmu***. Bandung: Penerbit ITB.
15. Suryasubrata, S. 1998. ***Metodologi Penelitian***. Jakarta: PT Rajagrafindo Persada.
16. True, J.A. 1989. ***Finding Out: Conducting and Evaluating Social Research***. 2nd Edition. Belmont: Wadsworth Publishing

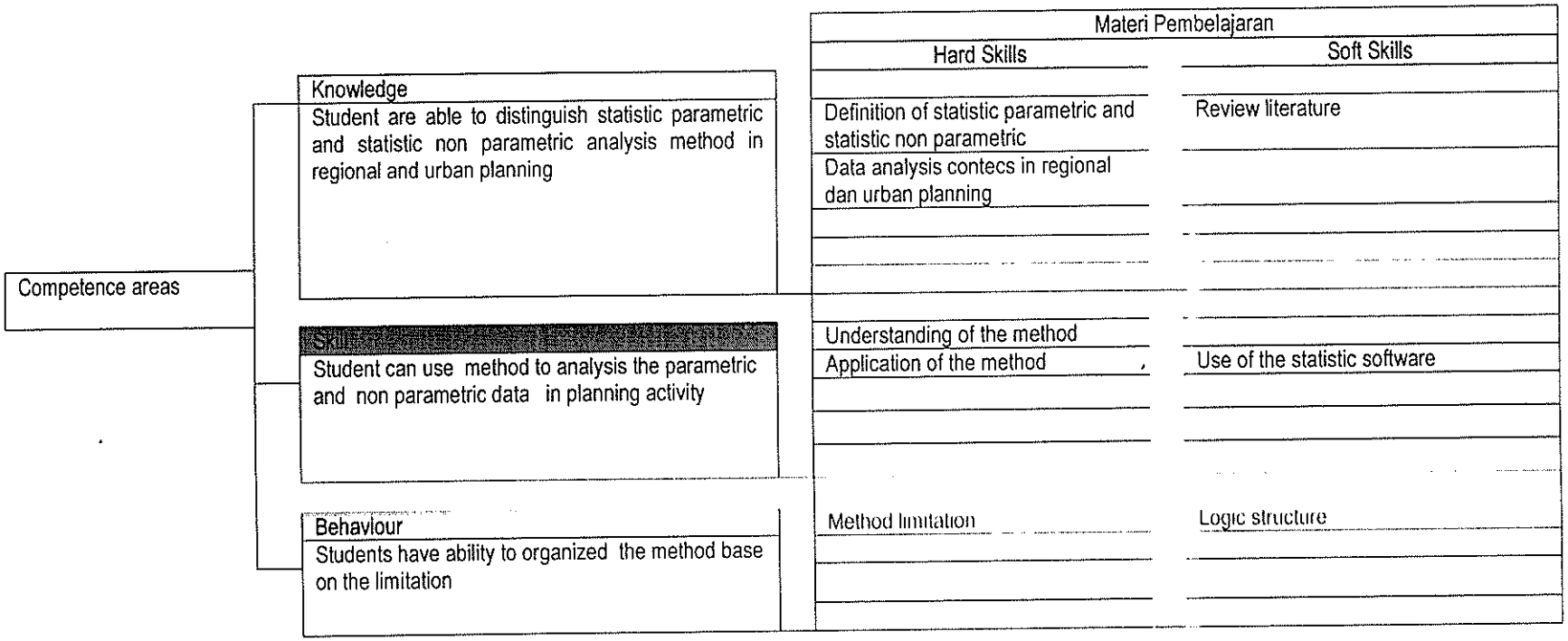
Course Syllabus

Course Name	: Statistics
Code	:
Credit	: 2
Semester	: I
Coordinator	: Maryono, ST. MT
Lecturers	: Okto Risdianto Manullang ST MT Drs. Agus Rusgiyono, MT
Course Description	: This course discusses about the method of statistic parametric and statistic non parametric to analysis and describe data for regional and Urban planning
Course Structure :	
Theory (class)	: 60%
Practical works	: 40%

Key Reading

- Best, Joel (2001). *Damned Lies and Statistics: Untangling Numbers from the Media, Politicians, and Activists*. University of California.
- Desrosières, Alain (2004). *The Politics of Large Numbers: A History of Statistical Reasoning*, Trans. Camille Naish, Harvard University Press
- Hacking, Ian (1990). *The Taming of Chance*. Cambridge University Press.
- Lindley, D.V. (1985). *Making Decisions*, 2nd ed., John Wiley & Sons.
- Stigler, Stephen M. (1990). *The History of Statistics: The Measurement of Uncertainty before 1900*. Belknap Press/Harvard University Press.
- Tijms, Henk (2004). *Understanding Probability: Chance Rules in Everyday life*. Cambridge University Press.
- Mount, Ellis (2005). *Essentials of inferential statistics*, 4th ed., Sci-Tech News.
- Wasserman, Larry, "All of Nonparametric Statistics", Springer (2007)
- Gibbons, Jean Dickinson and Chakraborti, Subhabrata, "Nonparametric Statistical Inference", 4th Ed.

Course Competences



Learning Plan

Week	Contents	Learning Method	Learning outcome	Assessment criteria	weight
1	Statictical theory for regional and urban planning	Class discussion	To understanding and compare of statistics theory in regional and urban planning application	Accuracy to take an example of application statistical problem in planning	5%
2	Statitistic parametric dan statistic non parametric method for regional and urban planning	Class discussion	To classify and compare of statistics parametric and statistic non parametric in regional and urban planning application	Accuracy to take an example of application statistical problem of statistic parametric and statistic no parametric	5%
3	Sampling method and data	Class discussion	To formulate sampling method of data requirement in planning.	Accuracy to use the sampling method	7,5%
4	Student t test	Class discussion	To formulate key aspect in aplication of student t test for data analysis	Accuracy in process of statistical prosedure and analysis	7,5%
5	chi-square test	Class discussion	To formulate key aspect in aplication of chi-square test for data analysis	Accuracy , in process of statistical prosedure and analysis	7,5%
6	Analysis of variance (ANOVA)	Class discussion	To formulate key aspect in aplication of Analysis of variance (ANOVA) for data analysis	Accuracy in process of statistical prosedure and analysis	7,5%
7	MID Semester exam				
8	Mann-Whitney U	Class discussion	To formulate key aspect in aplication of Mann-Whitney U for data analysis	Accuracy in process of statistical prosedure and analysis	7,5%
9	Regression analysis	Class discussion	To formulate key aspect in aplication of Regression analysis for data analysis	Accuracy in process of statistical prosedure and analysis	7,5%
10	Factor Analysis	Class discussion	To formulate key aspect in aplication of Factor Analysis for data analysis	Accuracy in process of statistical prosedure and analysis	7,5%
11	Correlation	Class discussion	To formulate key aspect in aplication of Correlation for data analysis	Accuracy in process of statistical prosedure and analysis	7,5%
12	Pearson product-moment	Class discussion	To formulate key aspect in	Accuracy in process of	7,5%

	correlation coefficient		aplication of Pearson product-moment for data analysis	statistical prosedure and analysis	
13	Spearman's rank correlation coefficient	Class discussion	To formulate key aspect in aplication of Spearman's rank correlation coefficient for data analysis	Accuracy in process of statistical prosedure and analysis	7,5%
14	Statistical pratictise in spatial planning	Practical works	To application of statistic software in case if spatial planning	Accuracy in process of statistical prosedure and analysis	7,5%
15	Praktek statistik dalam analisis spatial	Practical works	To application of statistic software in case if spatial planning	Accuracy in process of statistical prosedure and analysis	7,5%
16	Final exam				

Bacaan utama :

- Best, Joel (2001). *Damned Lies and Statistics: Untangling Numbers from the Media, Politicians, and Activists*. University of California.
- Desrosières, Alain (2004). *The Politics of Large Numbers: A History of Statistical Reasoning*, Trans. Camille Naish, Harvard University Press
- Hacking, Ian (1990). *The Taming of Chance*. Cambridge University Press.
- Lindley, D.V. (1985). *Making Decisions*, 2nd ed., John Wiley & Sons.
- Stigler, Stephen M. (1990). *The History of Statistics: The Measurement of Uncertainty before 1900*. Belknap Press/Harvard University Press.
- Tijms, Henk (2004). *Understanding Probability: Chance Rules in Everyday life*. Cambridge University Press.
- Mount, Ellis (2005). *Essentials of inferential statistics*, 4th ed., Sci-Tech News.
- Wasserman, Larry, "All of Nonparametric Statistics", Springer (2007)
- Gibbons, Jean Dickinson and Chakraborti, Subhabrata, "Nonparametric Statistical Inference", 4th Ed.

Course Outlines

Course name	:	**Studio of Planning Process**
Code	:	TKP212P
Credits	:	4
Semester	:	IV
Coordinator	:	Jawoto Sih Setyono
Lecturers	:	Artiningsih Rukuh Setiadi
Course description	:	This course is a group project which is aimed at practicing planning activities at early phase, i.e. plan for planning, in a real selected case study. This course consists of studio or desk activities, field observation, surveys, and direct involvement with community in the selected case study.
Course structure (%)		
Theory (class)	:	20%
Studio/practical works	:	50%
Fieldworks	:	30%

Key readings

Anderson, L. (1995). *Guidelines for Preparing Urban Plans*. Chicago: APA Press.

Bendavid-Val, A. (1993). *Regional and Local Economic Analysis for Practitioners*. New York: Praeger.

Conyers, D. and P. Hills (1984). *An Introduction to Development Planning in the Third World*. Chichester: John Wiley and Sons.

Fink, A. (1995). *How to Design Surveys*. Thousand Oaks: Sage Publication.

Fink, A. (1995). *The Survey Handbook*. Thousand Oaks: Sage Publication.

Keeble, L. (1959). *Principles and Practice of Town and Country Planning*. London: The Estate Gazette.

Course competences

Competence areas		Learning contents	
		Hard skills	Soft skills
Knowledge	Students are able to understand and to design activities that relate to plan for regional and urban planning.	Role of data and information in planning Learning from fieldwork Planning process Planning support system	Use of software and computer System thinking and understanding
Skills	Students are capable to appropriately use the instruments of data collection, compilation, and presentation for planning purposes.	Secondary data collection Techniques to develop questionnaires Cointerpretation of secondary data Visual observation Techniques for understanding objects Interview techniques Interpretation of qualitative data	Community involvement skills Creative writing Use of research instruments Exploring intrinsic meaning
Behaviour	Students are able to organise activities to prepare planning in appropriate and effective.	Technical proposal Survey design Problem understanding Formulation of recommendation Seminar presentation	Proposal writing Working in group Oral presentation Problem solving skills

Learning plan

Week	Learning contents	Learning methods	Learning outcome	Assessment criteria	Weight
1.	Role of data and information in planning	Class discussion	To understand the role of data and information in regional and city planning.	Accuracy in describing the role of data and information.	5%
2.	Learning from fieldwork	Discussion and exercise	To explain how to develop understanding and meaning from empirical phenomena.	Robustness in describing objects and their meanings.	5%
3.	Planning process	Discussion and exercise	To classify the types and processes of planning based on certain approaches underpin the processes.	Clarity in classifying and differentiating the approaches.	5%
4.	Planning support system	Class discussion	To develop simple framework for planning support system.	Appropriateness in designing framework for planning process.	5%
5.	Technical proposal	Studio	To write comprehensive technical proposal designated to guide planning activities at early phases.	Completeness of the proposal in terms of content and format.	10%
6.	Survey design	Studio	To develop a wokplan for planning surveys.	Detail of instruments proposed and stages involved.	10%
7.	Techniques to develop questionnaires	Studio	To construct effective and communicative questionnaires based on certain objectives.	Contents and structure of questionnaires.	5%
8.	Interview techniques	Simulation	To form a interviewing agenda and to do a well structured and effective interview.	Contents and structure of interview.	5%
9.	Secondary data collection	Fieldworks	To do data collection and its related activities in given case studies.	Match between proposal and data gathered from survey/observation.	5%
10.	Visual observation	Fieldworks	To conduct visual observation and take note of the experiences from the field works.	Accuracy in catching objects and its meaning.	5%
11.	Interpretation of secondary data	Studio	To compile and interpret secondary data sistematicallly.	Comprehensiveness and depth of data interpretation and understanding.	5%

Week	Learning contents	Learning methods	Learning outcome	Assessment criteria	Weight
12.	Interpretation of qualitative data	Studio	To compile and interpret qualitative data sistematically.	Depth in data interpretation.	5%
13.	Techniques for understanding objects	Studio	To construct meaning behind the observed objects based information gathered from observation.	Strenght of exploring qualitative data.	5%
14.	Problem understanding	Studio and fieldworks	To develop links between one aspect to another from the observable case study.	Comprehensiveness in structuring the problems.	10%
15.	Formulation of recommendation	Studio	To recommend follow-up action and planning from the problem identification as a planning input.	Link between problems and recommendation.	10%
16.	Seminar presentation	Studio	To present findings in a public seminar involving community and other stakeholders groups.	Method used in presentation and response to the audience.	5%

Selected readings

Anderson, L. (1995) *Guidelines for Preparing Urban Plans*. Chicago: APA Press.

Bendavid-Val, A. (1993). *Regional and Local Economic Analysis for Practitioners*. New York: Praeger.

Conyers, D dan P Hills (1984) *An Introdution to Development Planning in the Third World*. Chichester: John Wiley and Sons.

Fink, A (1995) *How to Analyze Survey Data*. Thousand Oaks: Sage Publication.

Fink, A (1995) *How to Design Surveys*. Thousand Oaks: Sage Publication.

Fink, A (1995) *How to Report on Surveys*. Thousand Oaks: Sage Publication.

Fink, A (1995) *The Survey Handbook*. Thousand Oaks: Sage Publication.

Keeble, L (1959) *Principles and Practice of Town and Country Planning*. London: The Estate Gazette.

Ruiter, W. and F.M. Sanders (1998). *Physical Planning*. Delf: Faculty of Civil Engineering and Geosciences, TU Delf.

Course Outlines

Course name	:	**Regional Development Planning**
Code	:	TKP208
Credit	:	3
Semester	:	IV
Coordinator	:	Jawoto Sih Setyono
Lecturers	:	Wiwandari Handayani Muhammad Muktiali
Course description	:	This course discusses and examines the foundation theories for regional development planning, issues and problems of the regions, strategies and approaches for regional development and the framework of process and analysis for regional development. The discussion will focus mainly on the regional problems of developing world and Indonesia in particular.

Course structure (%)

Theory (class)	:	60%
Studio/practical works	:	20%
Field works	:	20%

Key readings:

Dawkins, C.J. (2003) Regional development theory: conceptual foundations, classic works, and recent developments, *Journal of Planning Literature*, 18 (2): 131-172

Conyers, D. (1984) Bridging the gap between north and south: towards a common approach to intra-regional planning, *Third World Planning Review*, 8 (4): 339-361

Douglass, M. (1998) A regional network strategy for reciprocal rural-urban linkages: an agenda for policy research with reference to Indonesia, *Third World Planning Review*, 20 (1), pp. 1-25

Friedmann, J. (1976) Regional development planning: the progress of a decade, in Friedmann and Alonso (eds.) *Regional Policy: Reading in Theory and Applications*, Massachussett: MIT Press, pp. 791-808

McGee, T.M. (2001) Rethinking regional policy in the era of rapid urbanization and volatile globalization, in Kumssa and McGee (eds.), *New Regional Development Paradigms: Globalization and the New Regional Development*, Westport: Greenwood Press, pp. 75-87

Simon, D. (1990) The question of regions, in Simon (ed.) *Third World Regional Development: a Reappraisal*, London: Paul Chapman Publishing Ltd., pp. 3-23

Course competences

Competence areas		Learning contents	
		Hard skills	**Soft skills**
	Knowledge Students are able to distinguish and compare different concepts, strategies, and practices of regional development planning with regards to its theoretical foundations and possibility of applications.	Definitions and scope of a region and regional planning Foundation theories of regional development Regional problems and issues: past, now, then Spatial strategies for regional development Economic strategies for regional development Institutional strategies for regional development Regional competitiveness Sustainable regional development	Critical review of key reading materials Group/team working Oral and written presentation Synthesis skills
	Skills Students can choose and use the appropriate methods of analysis to understand regional problems and to develop regional development strategies.	Process of regional development planning Regional aggregate analysis Intraregional analysis Regional problems structuring	Use of software/computer Use of internet
	Behaviour Students have ability to organise activities for a regional development planning initiative in a selected case region.	Regional problems and issues generation Plan for regional planning Regional strategy and policy formulation Practice of regional planning initiative	Proposal writing Scenario formulation Seminar Problems solving skills

Learning plan

Week	Contents	Learning method	Learning outcome	Assessment criteria	Weight
1.	Definitions and scope of a region and regional planning	Class discussion	To compare the terms of region and regional planning according to its theoretical perspective and practical application.	Accuracy in explaining classification and to take an example from the classification	5%
2.	Foundation theories of regional development	Class discussion	To classify foundation theories of regional development based on certain paradigm that underpins the theories.	Critical level in written assignment to evaluate the given reading materials	5%
3.	Regional problems and issues: past, now, then	Case presentation	To develop links between one core problem with other aspects under a certain theoretical perspective.	Comprehensiveness in linking theory and actual problems	10%
4.	Spatial strategies for regional development	Class discussion	To formulate key points of spatial dimension for regional development planning.	Completeness of factors discussed in key points formulation	5%
5.	Economic strategies for regional development	Class discussion	To formulate key points of economic dimensions for regional development planning.	Completeness of factors discussed in key points formulation	5%
6.	Institutional strategies for regional development	Class discussion	To formulate key points of institutional dimensions for regional development planning.	Completeness of factors discussed in key points formulation	5%
7.	Regional competitiveness	Problem based	To conclude factors that affect regional competitiveness	Appropriateness in linking theory and observed case studies	5%
8.	Sustainable regional development	Problem based	To explain economic, social, environmental and institutional dimensions of sustainable regional development	Appropriateness in linking theory and observed case studies	10%
9.	Process of regional development planning	Class discussion	To develop a framework for regional development planning process	Comprehensiveness of the proposed process	5%
10.	Aggregative regional analysis	Exercises	To practice aggregative regional analysis using the common methods of analysis	Mastery in doing analytical works	5%
11.	Intra-regional analysis	Exercises	To practice intra-regional analysis using the common methods of analysis	Mastery in doing analytical works	5%

Week	Contents	Learning method	Learning outcome	Assessment criteria	Weight
12.	Structuring regional problems	Problem based	To structure regional problems using common methods of problem structuring	Robustness in structuring regional problems	10%
13.	Understanding regional problems	Fieldwork	To systemize regional problems based on field observation	Comprehensiveness of observable regional problems	5%
14.	Formulation of design for planning	Studio	To organize a process of strategy formulation for regional development planning	Quality of planning design	5%
15.	Strategy for regional development planning	Studio	To develop a systematic and well-structured document for regional development planning	Appropriateness of proposed strategies	5%
16.	Practices of regional development planning	Studio	To present proposed strategies in a public seminar	Completeness of contents and attractiveness of presentation	10%

Selected reading materials

Conyers, D. (1984) Bridging the gap between north and south: towards a common approach to intra-regional planning, *Third World Planning Review*, 8 (4): 339-361

Dawkins, C.J. (2003) Regional development theory: conceptual foundations, classic works, and recent developments, *Journal of Planning Literature*, 18 (2): 131-172

Douglass, M. (1998) A regional network strategy for reciprocal rural-urban linkages: an agenda for policy research with reference to Indonesia, *Third World Planning Review*, 20 (1), pp. 1-25

Douglass, M. (2001) Urban and regional policy after the era of naïve globalism, in Kumssa and McGee (eds.), *New Regional Development Paradigms: Globalization and the New Regional Development*, Westport: Greenwood Press, pp. 33-55

Faridad, A. (1981) The nature and scope of regional planning and development, in Prantilla (ed.) *National Development and Regional Policy*, Nagoya: Maruzen Asia, pp. 85-99

Friedmann, J. (1976) Regional development planning: the progress of a decade, in Friedmann and Alonso (eds.) *Regional Policy: Reading in Theory and Applications*, Massachussett: MIT Press, pp. 791-808

Lo, F.C., K Salih, dan M. Douglass (1981) Rural-urban transformation in Asia, in Lo (ed.) *Rural-Urban Relations and Regional Development*, Nagoya: Maruzen Asia, pp. 7-43

McGee, T.M. (1992) The emergence of desakota regions in Asia: expanding a hypothesis, in McGee and Ginsburg (eds.) *Extended Mega-Urban Regions in Asia, Vancouber*: UBC Press, pp. 3-25

McGee, T.M. (2001) Rethinking regional policy in the era of rapid urbanization and volatile globalization, in Kumssa dan McGee (eds.), *New Regional Development Paradigms: Globalization and the New Regional Development*, Westport: Greenwood Press, pp. 75-87

Simon, D. (1990) The question of regions, in Simon (ed.) *Third World Regional Development: a Reappraisal*, London: Paul Chapman Publishing Ltd., pp. 3-23

Work, R. (2001) Decentralization, governance, and sustainable regional development, in Stohr, Edralin, and Mani (eds.), *New Regional Development Paradigms: Decentralization, Governance, and the New Planning for Local-Level Development*, Westport: Greenwood Press, pp. 21-33

Course Syllabus

Course name	:	Location and space pattern analysis
Code	:	PWK 201
Credit	:	4
Semester	:	III
Coordinator	:	Dra. Bitta Pigawati,MT
Lecturer	:	Wido Prananing Tyas,ST,MDP
Lecturer	:	Sri Rahayu, SSi, MSi
Course description	:	Discussing the bases of location theory in any activities including its application in the process of regional and city planning analysis. The locations mentioned above are generally seen from economic point of view and other factors as well.
Course structure (%)		
Theory (class)	:	60%
Practical works	:	40%
Field work	:	

Key reading

1. Abler, R., J.S. Adams, and P. Gould. 1972. ***Spatial Organization**: The Geographer's View of the World*. London: Prentice Hall International
2. Aronoff, S., 1989, *Geographic information Systems: A Management Perspective*. WDL.. Ottawa
3. Beckmann, Mn. 1986. ***Location Theory***. New York: Random House.
4. Chapman, K. dan D.F. Walker. 1990. ***Industrial Location***. Oxford: Blackwell.
5. Daskin, M. 2000. ***Discrete Location Models**: Theory and Analysis*. New York: Sage Publication Ch. 3Foot, D. 1981. ***Operational Urban Models.*** London, Methuen Ch. 3
6. Haynes, K.E. dan A.S. Fotheringham. 1984. ***Gravity Model and Spatial Interaction Models***. New York: Sage Publication Ch. 13, p. 29 – 40
7. Jones, K. dan J. Simmons 1993. ***Location, Location, Location: Analyzing the Retail Environment***. Ontario: Nelson Canada Ch. 12
8. King, L. 1981. ***Central Place Theory.*** New York: Sage Publication
9. Lloyd, Peter E. and Peter Dicken. 1990. ***Location in Space: Theoritical Approach to Economic** Geography*. New York: Harper and Row
10. Mier, Bingham. 1993. ***Theories of Local Economic Development.*** Sage Publications
11. Mills, E. (ed.). 1986. ***Handbook of Urban and Regional Economic*** **(Volume II, Urban Economic)**. Amsterdam: Elsevier Science Publisher. Ch. 27

12. Ottensman. 1985. ***Basic Microcomputer Programs for Urban Analysis and Planning,*** Chapman : Hall Ney York Ch. 9
13. Scholten, H., and Stillwell, 1990. *Geographical Information Systems for Urban and Regional Planning.* Netherlands: Kluwer Academic Publisher
14. Rondinelli, 1985. Methods of Regional Analysis. Charleston: Wenwoth.
15. Rushton, G.. 1979. ***Optimal Location of Facilities.*** Wentworth: COMPPress Ch. 1.Ch. 2
16. Webber, M. 1984. ***Industrial Location.*** Sage Publications
17. ....., *PC Understanding GIS*, ESRI, California, 1990
18. ....., *Arc View GIS*, ESRI, United States Of America, 1996

Course competences

Competence area		Materials	
		Hard skills	**Soft skill**
	Knowledge	The definition of location and space pattern analysis and its range	
		Bases of Von Thunen Theory	
	Students should be able: - to explain the definition of location theory in any activities, - to formulate the location for any activities in relation to the formulation of regional and city development policy.	The implication of Von Thunen Theory on land and space structure zones	Critical review of reading materials
		Weber and Losch Theory *(classical industrial location and its hereditary)*	Team work
		Losch and Christaller Theory *(central place theory)*	Presentation, cases study
		Bases of industrial activity location	Relationship between concept and cases
		Bases of retail activity location	
		Facility locations	
	Skills	Industrial activity location analysis	Soft-wares using
		Retail activity location analysis	Internet
	Students should be able to use some analysis techniques and methods to examine the inclination of locations for any activities in relation to the regional and city planning	Space interaction analysis Analysis of settlement center system and space composition	
		Aplication of SIG for space analysis	
		Location analysis	
	Behaviour		
	Systematic thinking, innovative, and perceptive for any phenomena and policy changing	Introduction of SIG for location and space pattern analysis	Problem solving ability

Learning plan

Week	Content	Lerning method	Learning outcome	Assesment criteria	Weight
1.	Introduction of location theory Definition of location and space pattern analysis and its range	class discussion, case presentation	To explain the definition of location theory and its position on the city and regional planning	Appropriateness of giving examples of location and space pattern analysis for regional and city planning activities	5%
2.	Bases of Von Thunen Theory	class discussion, case presentation	To explain the bases of classical location theory of Von Thunen as the basic development approach of contemporary location analysis	Ability in explaining the material and their critical level in writing it	5%
3.	The implication of Von Thunen Theory on land and city space structure zones	class discussion, case presentation	To explain the implication of Von Thunen theory on land and city space structure zones	Ability in explaining the material and their critical level in writing it	5%
4.	Weber and Losch Theory (classical industrial location and its hereditary)	class discussion, case presentation	To explain the classical industrial theory and its hereditary	Ability in explaining the material and their critical level in writing it	5%
5.	Losch and Christaller Theory (*central place theory*)	class discussion, case presentation	To explain the concept of *central place theory* and its application	Ability in explaining the material and their critical level in writing it	5%
6.	Bases of industrial activity location	class discussion, case presentation	To explain the approaches used in the industrial location analysis and its related components	Ability in explaining the material and their critical level in writing it	5%
7.	Industrial location analysis	class discussion, exercise, task	To do analysis on the industrial location using some available methods	Ability in using analysis instruments	10%
8.	Bases of retail activity location	class discussion, case presentation	To explain the approaches of retail activity analysis and any other non-production activities	Ability in explaining the material and their critical level in writing it	5%
9.	Retail activity location analysis	class discussion, exercise, task	To do analysis on retail activity location using its methods	Ability in using analysis instruments	10%

10.	Facility locations	class discussion, case presentation	To explain the characteristic of location of the service facility and do the location analysis	Ability in explaining the material and the appropriateness of choosing analysis instruments	10%
11.	Space interaction analysis	class discussion, exercise, task	To explain both the definition and kinds of space interaction of inter-activity and do the analysis of the space interaction using the available methods	Ability in using analysis instruments	10%
12.	Analysis of settlement center system and space composition	class discussion, exercise, task	To explain both the definition and kinds of analysis of settlement center system, and do the analysis on it	Ability in using analysis instruments	10%
13.	Introduction of SIG for location and space pattern analysis	class discussion, case presentation	To explain the definition and the advantages of SIG for location and space pattern analysis	Ability in explaining and mastering the material of SIG	5%
14.	SIG application for space analysis	class discussion, exercise, task	To do the inter-activity location and space pattern analysis using SIG method	Ability in using SIG analysis methods	10%

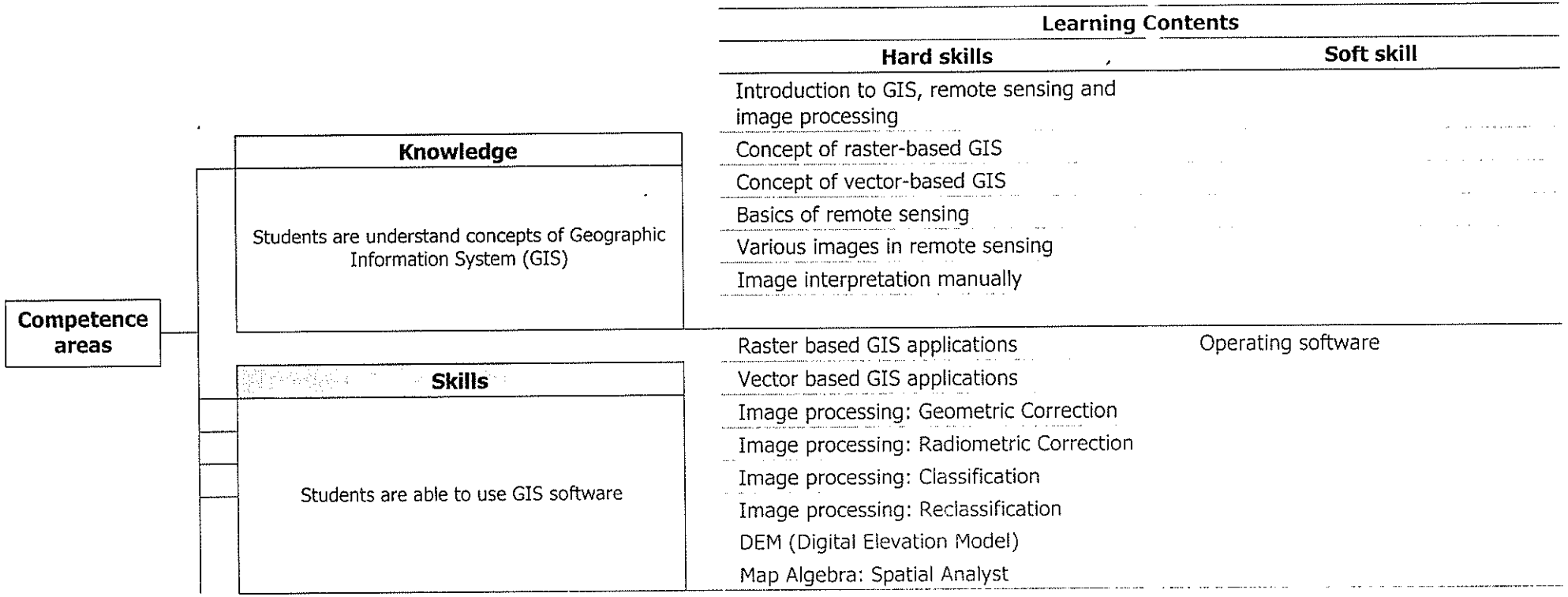
Selected reading material

1. Abler, R., J.S. Adams, and P. Gould. 1972. ***Spatial Organization***: *The Geographer's View of the World.* London: Prentice Hall International
2. Aronoff, S., 1989, *Geographic information Systems: A Management Perspective*. WDL.. Ottawa
3. Beckmann, Mn. 1986. ***Location Theory***. New York: Random House.
4. Chapman, K. dan D.F. Walker. 1990. ***Industrial Location***. Oxford: Blackwell.
5. Daskin, M. 2000. ***Discrete Location Models***: *Theory and Analysis*. New York: Sage Publication Ch. 3Foot, D. 1981. ***Operational Urban Models.*** London, Methuen Ch. 3
6. Haynes, K.E. dan A.S. Fotheringham. 1984. ***Gravity Model and Spatial Interaction Models***. New York: Sage Publication Ch. 13, p. 29 – 40
7. Jones, K. dan J. Simmons 1993. ***Location, Location, Location: Analyzing the Retail Environment***. Ontario: Nelson Canada Ch. 12
8. King, L. 1981. ***Central Place Theory.*** New York: Sage Publication
9. Lloyd, Peter E. and Peter Dicken. 1990. ***Location in Space: Theoritical Approach to Economic*** *Geography*. New York: Harper and Row
10. Mier, Bingham. 1993. ***Theories of Local Economic Development.*** Sage Publications

11. Mills, E. (ed.). 1986. ***Handbook of Urban and Regional Economic*** **(Volume II, Urban Economic)**. Amsterdam: Elsevier Science Publisher. Ch. 27
12. Ottensman. 1985. ***Basic Microcomputer Programs for Urban Analysis and Planning,*** Chapman : Hall Ney York Ch. 9
13. Scholten, H., and Stillwell, 1990. *Geographical Information Systems for Urban and Regional Planning*. Netherlands: Kluwer Academic Publisher
14. Rondinelli, 1985. Methods of Regional Analysis. Charleston: Wenwoth.
15. Rushton, G.. 1979. ***Optimal Location of Facilities***. Wentworth: COMPPress Ch. 1.Ch. 2
16. Webber, M. 1984. ***Industrial Location.*** Sage Publications
17. ....., *PC Understanding GIS*, ESRI, California, 1990
18. ....., *Arc View GIS*, ESRI, United States Of America, 1996

Course Syllabus

Course Name	:	Geographic Information System
Code/Credit/Semester	:	..../3 sks/VI
Coordinator		Dr. Imam Buchori
Lecturers	:	Sri Rahayu Widjonarko
Course Description	:	This course gives the students knowledge and skills on Geographic Information System (GIS) and its applications for spatial analyses.
Course structure (%)		
Theory	:	30%
Studio/practical works	:	70%
Field works	:	0%



Behaviour	Programming and User Interface
Students have awareness, intention and motivation to use GIS technology	

Learning Plan

Course Name : Geographic Information System
Code/Credit/Semester : ..../3 sks/VI
Coordinator Dr. Imam Buchori
Lecturers : Sri Rahayu
Widjonarko
Course Description : This course gives the students knowledge and skills on Geographic Information System (GIS) and its applications for spatial analyses.

Week	Content	Learning Method	Learning outcome	Assessment criteria	Weight
1.	Introduction to GIS, remote sensing and image processing	Class discussion		Comprehensiveness of the discussed topic	5%
2.	Basics of remote sensing	Class discussion	To understand basic principles of remote sensing	Comprehensiveness of the discussed topic	5%
3.	Various images in remote sensing	Class discussion	To distinguish various images (satellite images)	Comprehensiveness of the discussed topic	5%
4.	Image interpretation manually	Class discussion and practice	To interpret image manually (using interpretation keys)	Ability to interprete	7,5%
5.	Concept of raster-based GIS	Class discussion	To understand raster based GIS	Comprehensiveness of the discussed topic	5%
6.	Raster based GIS applications	Class discussion and practice	To acquire and process raster based GIS data for spatial analyses	Ability to use raster based GIS software	5%
7.	MID Test				
8.	Concept of vector-based GIS	Class discussion	Comprehensiveness of the discussed topic	Comprehensiveness of the discussed topic	5%
9.	Vector based GIS applications	Class discussion and practice	To acquire and process vector based GIS data for spatial analyses	Ability to use vector based GIS software	5%
10.	Image processing: Geometric Correction	Class discussion and practice	To do geometric correction in an image	Ability to use raster based GIS software for geometric correction	7,5%
11.	Image processing: Radiometric Correction	Class discussion and practice	To do radiometric correction in an image	Ability to use raster based GIS software for	7,5%

				radiometric correction	
12.	Image processing: Classification	Class discussion and practice	To classify digital image	Ability to use raster based GIS software for classification	7,5%
13.	Image processing: Reclassification	Class discussion and practice	Ro reclassify and to examine details of digital image interpretation	Ability to use raster based GIS software for reclassification	7,5%
14.	DEM (Digital Elevation Model)	Class discussion and practice	To analyze DEM	Ability to use GIS software for DEM	7,5%
15.	Map Algebra: Spatial Analyst	Class discussion and practice	To spatially analyze raster based GIS	Ability to use GIS software for spatial analyst	10%
16.	Programming and User Interface	Class discussion and practice	To design user interface using language programs for GIS	Ability to design user interface using language programs for GIS	10%

LITERATURES

Aronoff, S. (1989) *Geographic Information System: A Management Perspective*, Canada: WDL Publications.

Fischer, M.M., and Nijkamp P. (eds.) (1993) *Geographic Information Systems, Spatial Modeling, and Policy Evaluations*, Berlin Heidelberg: Springer-Verlag.
Bernhardsen, T. (1992) *Geographic Information System*, Arendal: Viak IT.

DeMers, M.N. (2002) *GIS Modeling in Raster*, New York: John Wiley & Sons Inc.

ESRI (1996a) *ArcView GIS: The Geographic Information System for Everyone*, Redlands, Calif.: Environmental Systems Research Institute.

ESRI (1996b) *ArcView Spatial Analysis: Advanced Spatial Analysis Using Raster and Vector Data*, Redlands, Calif.: Environmental Systems Research Institute.

ESRI (1996c) *ArcView Network Analyst: Optimum Routing, Closest Facility and Service Area Analysis*, Redlands, Calif.: Environmental Systems Research Institute.

ESRI (1996d) *Avenue: Customization and Application Development for ArcView*, Redlands, Calif.: Environmental Systems Research Institute.

Juppenlatz, M., and Tian, Z.F. (1996) *GIS and Remote Sensing: Guidelines for Use by Planners and Decision Makers*, Roseville, McGraw-Hill Book Company Australia.

Star, J., and Estes, J. (1990) *Geographic Information System: an Introduction*, New Jersey: Prentice-Hall Inc.

Tomlin, C.D. (1994) *Geographic Information Systems and Cartographic Modeling*, Englewod Cliffs: Prentice Hall.

Description and Competention

Name	:	Planning methode and analysis (Metode Analisis Perencanaan)
Code	:	
SKS/Semester	:	3/VII
Lecturer	:	Yudi Basuki ST MT Okto Risdianto Manullang ST MT Dr.rer.nat. Ir. Imam Buchori
Description	:	Understanding and use of many planning methode and analysis is very important to student that who will be a Planner. This Topic will give and increase the ability of student to understand and practice many methode and analysis that use in planning analysis.

Content Proportion:

Theory	:	60%
Practice	:	40%

Competention of Topic		Materi Pembelajaran	
		Hard Skills	Soft Skills
	Knowledge Student be able to understand the use of planning methode and analysis in regional and city planning	Definition of Regional and City Planning Context of uses Planning Methode and analysis.in Regional and City Planning	Literature Review
	Skill Student be able to practice many methode and analyze of data phenomena in regional and city planning.	Understanding many methode Practice many methode Uses of software	Logical framework Identification of methode variable Variable correlation Methode accuration
	Behaviour Student be able to know and the limitation of many methode.	Limitation methode	Presentation Logical frame work

Teaching Planning

Week	Topic	Teaching Methode	Goals	Criterium	Weight Mark
1	Overview Review Planning Statistica (Statistika Perencanaan) Teaching contract	Teaching	Student be able to understand, explain the use of planning methode and analysis in Regional and City Planning	1. Ability to declare the position of Planning methode and analysis in Regional and City Planning	5%
2	Data	Teaching, Discussion and individual practice	1. Student be able to define the data 2. Student be able to explain data characteristic 3. Student be able to classificate date 4. Student be able to use data	1. Accuration of definition , clasified data declare	7,5%
3	Canonical Analysis	Teaching, Discussion and individual practice	Student be able to understand, and practice Canonical Analysis	Accuration of definition and practice in Canonical Analysis	7,5%
4	· Crosstab Analysis	Teaching, Discussion and individual practice	Student be able to understand, and practice Crosstab Analysis	Accuration of definition and practice in Crosstab Analysis	7,5%
5	Cluster Analysis	Teaching, Discussion and individual practice	Student be able to understand, and practice Cluster Analysis	Accuration of definition and practice in Cluster Analysis	7,5%
6	Tentament				
7	Discriminant Analysis	Teaching, Discussion and individual practice	Student be able to understand, and practice Discriminant Analysis	Accuration of definition and practice in Discriminant Analysis	7,5%
8	Principal Component and Factor Analysis	Teaching, Discussion and individual practice	Student be able to understand, and practice Principal	Accuration of definition and practice in Principal	7,5%

			Component and Factor Analysis	Component and Factor Analysis	
9	Multi Linear Regression	Teaching, Discussion and individual practice	Student be able to understand, and practice Multi Linear Regression	Accuration of definition and practice in Multi Linear Regression	7,5%
10	Trendline Forecasting	Teaching, Discussion and individual practice	Student be able to understand, and practice Trendline Forecasting	Accuration of definition and practice in Trendline Forecasting	7,5%
11	Logistic Regresion	Teaching, Discussion and individual practice	Student be able to understand, and practice Logistic Regresion	Accuration of definition and practice in Logistic Regresion	10%
12	Decision Making Process	Teaching, Discussion and individual practice	Student be able to understand, and practice Decision Making Process	Accuration of definition and practice in Decision Making Process	10%
13	Analytical Hierarchi Process	Teaching, Discussion and individual practice	Student be able to understand, and practice Analytical Hierarchi Process	Accuration of definition and practice in Analytical Hierarchi Process	10%
14	Delphi Analysis	Teaching, Discussion and individual practice	Student be able to understand, and practice Delphi Analysis	Accuration of definition and practice in Delphi Analysis	10%
14	Final Examination				

Sumber Referensi

1. Alonso, W. (1960), *A Theory of Urban Land Market*, Paper and Proceedings of the Regional Science Associations, **6**, 149-158.
2. Alonso, W. (1964), *Location and Land Use*, Harvard University Press, Cambride, Massachusetts.
3. Batty, M. (1972), *Recent Developments in Land Use Modelling: A Riview of British Research*, Urban Studies, **9 (2)**, 151-177.
4. Beckmann, M.J. (1969), *On the Distribution of Urban Rent and Residential Density*, Journal of Economics Theory, **1**, 60-67.
5. Beckmann, M.J. (1974), *Spatial Equilibrium in the Housing Market*, Journal of Urban Economics , **1**, 90-107.
6. Beckmann, M.J. (1969), *On the Exponential Distance Effect*, Transportation Research, **10**, 357-358.
7. Beesley, M.E. dan Dalvi, M.Q. (1974), *Spatial Equilibrium and Journey to Work*, Journal of Transport and Economics and Policy (Sept 1974), 197-222.
8. Bendtsen, P.H. (1976), *Mean Travel Time and the Exponent of the Deterrent Function*, Transportation Research, **10**, 359-361.
9. Catanese, Anthony dan James C. Snyder (1996), *Introduction to Urban Planning*, Mc Graw-Hill Inc., New York.
10. Chapín, F. Stuart, Edward J. Kaiser, dan David R. Godchalk (1995), *Urban Land Use Planning*, University of Illinois, Urbana – Chicago.
11. Chapin, F.W. dan Weiss, S.F. (1968), *A Probabilistic Model for Residential Growth*, Transportation Research, **2**, 375-390.
12. Cervero, R. (1989a), *America's Suburban Centers: The Land Use – Transportation Link*, Boston: Unwin Hyman.
13. Cervero, R. (1989a), *Jobs-housing Balancing and Regional Mobility*, Journal of the American Planning Association, **55 (2)**, 136-150.
14. Cervero, R. (1996), *Jobs-housing Balance Revisited: Trends and Impacts in the San Fransisco Bay Area*, Journal of the American Planning Association, **62 (4)**, 492-511.
15. Davidson, K.B. (1976), *Effect of a Subway on the Spatial Distribution of Population*, Journal of Transport Economics and Policy, **10 (2)**, 126-136.
16. Eastin, R. V. and Shapiro, P. (1973a), *The Design of a Location Experiment*, Transportation Research, 7, 17-29.
17. Eastin, R. V. and Shapiro, P. (1973b), *The Design of a Location Experiment: A Continuous Formulation*, Transportation Research, 7, 31-38.
18. Esri. 1994. *PC Network Adres Geocoding and Geographic Network Analysis*.USA: ESRI. Inc

19. Dunphy, R.T. (1982, *Defining Regional Employment Centers in an Urban Area*, Transportation Research Record, **861**, 298-310.

20. Firman, T. (1996), *The Spatial Pattern of Urban Population Growth in Java 1980-1990*, Bulletin of Indonesian Economics Studies, **28 (2)**, 95-109.

21. Firman, T. (1997), *Land Conversion and Urban Development in the Northern Region of West Java*, Urban Studies, **34 (7)**, 1027-1046.

22. Fujita, M. dan F. Ogawa (1982), *Multiple Equilibria and Structural Transition of Non Monocentric Urban Configurations*, Regional Science and Urban Economics, **12**, 161-196.

23. Gakenheimer, R. (1982), *Transport in the National Urban Development Study of Indonesian*, (unpublished).

24. Giuliano, G. (1991), *Is Jobs-Housing Balance a Transportation Issue?*, Transportation Research Record, **1305**, 305-312.

25. Giuliano, G. (1989), *New Directions for Understanding Transportation and Land Use*, Environment and Planning A, **21**, 145-159.

26. Giuliano, G. dan K. Small (1993), *Is the Journey to Work Explained by Urban Structure?*, Urban Studies, **30 (9)**, 1485-1500.

27. Gordon, P. dan H.L. Wong (1985), *The Cost of Urban Sprawl; Some New Evidence*, Environment and Planning A, **17**, 661-666.

28. Gordon, P., A. Kumar, dan H.W. Richardson (1989a), *The Influence of Metropolitan Spatial Structure on Commuting Time*, Journal of Urban Economics, **26**, 138-151.

29. Gordon, P., A. Kumar, dan H.W. Richardson (1989b), *Congestion, Changing Metropolitan Structure, and City Size in the United State*, International Regional Science Review, **12 (1)**, 45-56.

30. Greene, D.L. dan J. Barnbrock (1978), *A Note on Problem in Estimating Exponential Urban Density Models*, Journal of Urban Economics, **5**, 285-290.

31. Griffith, D.A. (1981), *Modelling Urban Population Density in a Multicentered City*, Journal of Urban Economics, **9**, 298-310.

32. Hutchinson, B.G. (1974), *Principles of Urban Transport System Planning*, Cripta Book Company, Washington DC.

33. Horowitz, J. (1976), *Effects of Travel Time and Cost on the Frequency and Structure of Automobile Travel*, Transportation Research Record, 592.

34. Helsley, R.W. dan A.M. Sullivan (1991), *Urban Subcenter Formation*, Regional Science and Urban Economics, **21**, 255-275.

35. Ingram, D.R., (1971), *The Concept of Accessibility: A Search for an Operational Form*, Regional Studies, **5 (2)**, 101-107.

36. Kanafani, Adib. 1983. *Transportation Demand Analysis*. New York: Mc. Graw Hill.

37. Klaassen, L.H., Bourdrez, J.A., dan Volmuller, J. (1981), *Transport and Reurbanisation*, Gower Publishing Company Limited, England.

38. Kombaitan, B., Utami, D., dan Firmansyah (1997), *Proses Suburbainsasi: Kasus Kotamadya Bandung dan Sekitarnya*, Jurusan Teknik Planologi FTSP ITB.

39. Kombaitan B., Kusumantoro, I.P., Sutriadi R. (1998), *Identifikasi Kesenjangan Rumah-Kerja: Tinjauan Awal untuk Kasus Kotamadya Bandung*, Makalah disiapkan untuk Simposium Sehari Penelitian Transportasi di Universitas, KSTAU-ITB, Bandung.

40. Kombaitan, B. (1999), *Perubahan Struktur Ruang Perkotaan dan Perkembangan Pola Ruang Pergerakan Bekerja: Kasus Studi Kotamadya Bandung dan Sekitarnya*, Disertasi, ITB.

41. Kusbiantoro, B.S. (1996), *Transportation Problem in Rapidly New Town Development Area*, Makalah Sajian dalam The 4th PRSCO Summer Institute, RSAI, Tsukuba, Jepang.

42. Levine, J. (1998), *Rethinking Accessibility and Jobs-Housing Balance*, Journal of the American Planning Association, **64 (2)**, 133-149.

43. Lianos, T.P. (1972), *The Migration Process and Time Lags*, Journal of Regional Science, **12 (3)**, 425-433.

44. McDonald, J.F. (1985), *The Intensity of Land Use in Urban Employment Sectors, Chicago 1956-1970*, Journal of Urban Economics, **18**, 261-277.

45. McDonald, J.F. dan H.W. Bowmann (1976), *Some Test of Alternative Urban Population Density Functions*, Journal of Urban Economics, **3**, 242-252.

46. McDonald, J.F. dan P.J. Prather (1994), *Suburban Employment Centers: The Case of Chicago*, Journal of Urban Economics, **31 (2)**, 201-258.

47. McDonald, J.F. (1987), *The Identification of Urban Employment Subcenters*, Journal of Urban Economics, **21**, 242-258.

48. Mills, E.S. (1969), *The Value of Urban Land, in the Quality of Urban Environment*, H.S. Perloff, Editor, Johns Hopkins Press, Baltimore.

49. Mills, E.S. (1972), *Studies in the Structure of Urban Economy*, John Hopkins Press, Baltimore.

50. Mills, E.S. (1970), *Urban Density Function*, Urban Studies, **1**, 5-20.

51. Miro, Fidel. 2005. *Perencanaan Transportasi Untuk Mahasiswa, Perencana dan Praktisi*. Jakarta: Penerbit Erlangga

52. Muth, R.F. (1969), *Cities and Housing: the Spatial Pattern of Urban Residential Land Use*, University of Chicago Press, Chicago.

53. Muth, R.F. (1985), *Models of Land Use, Housing, and Rent: an Evaluation*, Journal of Regional Science, **25 (4)**, 593-606.

54. Muth, R.F. (1961), *The Spatial Structure of the Housing Market*, Papers of the Regional Science Association, **7**, 207-220.

55. Muth, R.F. (1965), *The Variation of Population Density and its Components in South Chicago*, Papers of the Regional Science Association, **15**, 173-183.

56. Newling, B.E. (1966), *Urban Growth and Spatial Structure: Mathematical Models and Emperical Evidence*, Geographical Review, 59 (2), 242-252.

57. Nowland, D.M. dan G. Stewart (1991), *Downtown Population Growth and Commuting Trips: Recent Experinces in Toronto*, Journal of the American Planning Association, **57**, 165-182.

58. Ogawa, H. dan M. Fujita (1980), *Equilibrium Land Use Pattern in a Nonmonocentric City*, Journal of Regional Science, **20**, 455-476.

59. Papageorgiou, G.J., dan E. Casetti (1971), *Spatial Equilibrium Residential Land Values in a Multicenter Setting*, Journal of Regional Science, **11 (3)**, 385-389.

60. Pradoto, Hendriawati W.A. (1998), *Dampak Struktur Kota terhadap Pola Pergerakan: Studi Kasus Rencana Kota Industri Bukit Indah Barat*, Tugas Akhir Jurusan Perencanaan Wilayah dan Kota FTSP-ITB.

61. Peng, Zhong-Ren (1997), *The Jobs-Housing Balance and Urban Commuting*, Urban Studies, **34 (8)**, 1215-1235.

62. Punpuing, S. (1993), *Correlates of Commuting Patterns: a Case Study of Bangkok, Thailand*, Urban Studies, **30 (3)**, 527-546.

63. Romanos, M.C. (1977), *Households Location in a Liniear Multi-center Metropolitan Area*, Journal of Regional Science and Urban Economic, **7**, 233-250.

64. Romanos, M.C. (1967), *Residential Spatial Structure*, Lexington Books, Massachusetts.

65. Simpson, W. (1980), *A Simultaneous Model of Workplace and Residential Location Incorporating Job Search*, Journal of Urban Economics, **8**, 330-349.

66. Simpson, W. (1987), *Workplace Location, Residential Location, and Urban Commuting*, Urban Studies, **24**, 119-128.

67. Spiro, Kostof (1991), *The City Shape Urban Pattern and Meaning Through History*, Little Brown and Company, Canada.

68. Sujarto, Djoko (1993), *Kinerja dan Dampak Tata Ruang dalam Pembangunan Kota Baru: Studi Kasus Kota Terpadu Bumi Bekasi Baru*, Disertasi, ITB.

69. Soegijoko, S. (1993), *Creating Better Urban Structures*, Makalah disajikan pada The World Conference in the Global Age: Toward a New Urban Century, UN dan the Tokyo Metropolitan Government, Tokyo.

70. Song, S. (1992), *Spatial Structure and Urban Commuting*, Disertasi, University of California, Irvene.

71. Suryadi, Kadarsah dan M.Ali Ramdhani. 1998. *Sistem Pendukung Keputusan: Suatu Wacana Struktural Idealisasi dan Implementasi Konsep Pengambilan Keputusan*. Remaja Rosdakarya Offset, Bandung.

72. Tamin, Ofyar Z. (2000), *Perencanaan dan Pemodelan Transportasi*, Penerbit ITB, Bandung.

73. Thrall, G.L. (1988), *Statistical and Theoritical Issues in Verifying the Population Density Functions*, Urban Geography, **9 (5)**, 518-537.

74. Von Boventer, E. (1976), *Transportation Costs, Accessibility, and Agglomeration Economics: Centers, Subcenters, and Metropolitan Structure*, Papers of Regional Science Association, **37**, 167-184.

75. Vuchic, Vukan R. 1980. *Urban Public Transportation Systems and Technology*. New Jersey: Prentice-Hall. Inc

76. Wachs, M., B.D. Taylor, N. Levine, dan Ong, P. (1993), *The Changing Commute: a Case Study of Jobs-Housing Relationship Over Time*, Urban Studies, **30 (10)**, 1711-1729.

77. Waddell, P., B.J.L. Berry, dan I. Hoch (1993), *Housing Price Gradients: the Intersection of Space and Built Form*, Geographical Analysis, **25 (1)**, 5-19.

78. Waddell, P. dan V. Shukla (1993), *Employment Dynamics, Spatial Restructuring, and the Bussiness Cycle*, Geographical Analysis, **25 (1)**, 35-52.

79. Warpani, Suwardjoko. 1990. M*erencanakan Sistem Perangkutan*. Bandung: Penerbit ITB.

80. Winarso, H. dan B. Kombaitan (1997), *The Jabotabek Area: Space Restructuring and The Emergence of Formal Private Residential Developer*, Makalah sajian dalam The Fourth Asian Planning Schools Association Congress, Bandung.

81. Winarso, H. (2000), *Residential Land Developers' Behaviour in Jabotabek, Indonesia*, Disertasi, University College London, University of London.

82. Yunus, Hadi S. (2000), *Struktur Tata Ruang Kota*, Pustaka Pelajar, Yogyakarta.

83. Young, W. (1984), *A Non-Tradeoff Decision Making Model of Residential Location Choice*, Transportation Research A, **18A**, 1-11.

Learning Plan

Week	Contents	Learning Method	Learning outcomes	Assessment criteria	Weight
1.	Definition, role and city function, city structure and city elements	Discussion and presentation	To define types of city planning and approach to make a city planning	Critical level in written assignment to evaluate the given reading materials	10%
2.	Term of Reference Explanantion	Discussion and presentation	To create instruments and analysis tools needed for the planning process related within study object.	Submission of technical proposal and Survey Design 90% is correct.	10%
3.	Identification of planning object and data collecting activities	Survey, Discussion and presentation	To define weakness, limitation and potency within study object.	Identification of object study characteristics in the form of data compilation report.	20%
4.	City planning design guidelines	Group discussion, question and answer, presentation	To choose an appropriate city planning design towards object study characteristics.	Accuracy of city planning design and reasoning of the selected concept.	10%
5.	Strategic Planning	Group discussion, question and answer, presentation	To formulate a strategic planning and steps taken from physical analysis, spatial analysis and non spatial analysis.	Submission of detailed analysis to formulate the strategic planning.	30%
6.	Action Planning	Group discussion, question and answer, presentation	To formulate time, cost and activities needed to implement action planning in the form of program indication table.	Submission of an action planning.	10%
7.	Report Presentation	question and answer, presentation	To define key findings according to selected object study and explain the comprehensive city planning.	Presentation delivery 90% is correct.	10%

Selected Reading Materials

1. Anderson, Larz T. 1995. ***Guidelines for Preparing Urban Plans***. Chicago: APA Planners Press.
2. Bourne, Larry Stuart dan James Williams Simmons (ed). 1978. ***Systems of Cities: Readings on Structure, Growth, and Policy***. New York: Oxford University Press
3. Conyers, Diana and Peter Hills. 1984. ***An Introduction to Development Planning in The Third World***. New York: John Wiley & Sons.
4. Bergen, Frank van Steven, Vincent Gasperz. 1987. ***Analisis Kuantitatif untuk Perencanaan***. Bandung: Tarsito.
5. Kaiser, Edward J, David R. Godschalk, and F. Stuart Chapin. 1995. ***Urban Land Use Planning***. Urbana and Chicago: University of Illinois Press.
6. Kepmen PU Tahun 1986 Tentang Pedoman Penyusunan Rencana Kota
7. Kepmendagri Tahun 1998 Tentang Pedoman Teknis Penyelenggaraan Penataan Ruang di Daerah
8. Kepmenkimpraswil Tahun 2002, Tentang Pedoman Teknis Penyusunan RTRW Perkotaan
9. UU no. 26 Tahun 2007: Penataan Ruang.
10. PP no 10 tahun 2000
11. Oppenheim, Nobbert.1980. ***Applied Models in Urban and Regional Analysis***. New Jersey: Prentice Hall, Inc.
12. Warpani, Suwardjoko.1984 . ***Analisis Kota dan Daerah***. Bandung: ITB.
13. Sawicky, David S., Carl V. Patton.1986.***Basic Methods of Policy Analysis and Planning***. New Jersey: Prentice Hall.
14. C. Branch, Melville. 1985. ***Comprehensive City Planning Introduction and Explanation***. Washington D.C: APA Press.
15. Lynch, Kevin. 1980. ***City Sense and City Design***. USA: The MIT Press.
16. R. Minnery, John. 1986. ***Conflict Management in Urban Planning***. USA: Gower.
17. M. Levy, John. 2000. ***Contemporary Urban Planning***. New Jersey: Prentice Hall.
18. Hall, Peter. 1996. ***Cities of Tomorrow***. Britain: Blackwell Publication.
19. Patrick, Collin Kirk, Annis Chowdory. 1994. ***Development Policy and Planning***. London: Routledge.
20. Yeates, Maurice dan Barry, J. Garns, 1980, ***North American City***. 3rd Edition, New York: Harper and Row.
21. Yunus, Hadi Sabari, 2000. ***Struktur Tata Ruang Kota***, Yogyakarta: Pustaka Pelajar
22. Eisner, Simon; Arthur Gallion dan Stanley Eisher. 1992. ***The urban Pattern: City Planning and Design***, Sixth Edition. New York: Van Nostrand Reinhold.
23. Platt, Rutherford H; Rowan A Rowntree dan Pamela C. Muick. 1994. ***The Ecological City: Preserving and Restoring Urban Biodiversity***. Amherst : The University of Massachusetts.

SESSION OUTLINE PLAN

SUBJECT	:STUDIO PLANNING PROCCES
CODE NUMBER/ TIME MEETING SCHEDULE	:TKP 212 P/4 SEMESTER CREDIT UNIT :120 meanutes
MEETING	:FIRST (1 st)
A. PURPOSING	
GENERAL INSTRUCTIONAL PURPOSING	:After finishing this subject for one semester, college student are wished to get exparience in planning procces activities and having an ability to applicate urban and regional planning procces, specially on: 1. Planning some activities and their steps which is needed for applicating urban and regional planning activities. 2. Doing some steps of urban and regional planning activities according to urban and regional growth issues in Indonesia 3. Identify and invite public participation elements also stakeholders in urban and regional planning activities according to urban and regional growth issues in Indonesia which had identified before.
SPECIFIC INSTRUCTIONAL PURPOSING	:After following this subject, college students are expected to understand description, purpose, work system, and point system which is used in studio planning procces subject.
B. MAIN STUDY	:Introductions / background.
C. SUB MAIN STUDY	:1.Explaining Working Guide System Schema Of Studio Planning Procces Subject. 2.Explaining and Agreetation Planned Region Placement. 3.Deviding Teamwork (Subtancy And Region Teamwork) in Studio Planning Procces Subject.

4. Class Discussion And Team Work Discuse About:

- Deviding Teamwork (Subtancy And Region Teamwork)

-Forming Studio Planning Procces Organisation Class.

-Getting Respons From Working Guide System Schema.

5. Task :

- Survey Permission Preservation.

-Collecting Information (secunder data) About Planned Region Placement From Some References (Statistic Office, Library,Ect.)

-Introducing Planned Region Placement (Observation)

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background	1.Explaining first mathery (GIP and SIP)	Paying attention	-
2.	Preservation	2. Explaining working guide system schema. 3. Explaining and agreetation planned region placement. 4. Deviding teamwork including subtancy and region teamwork 5. class Discussion and Work in team	Paying attention	OHP and white board
3.	Clossing	Llittle explain for next subject	Paying attention	-

E. EVALUATION : -

F. REFERENSI : 1. UU No. 24 dan No.4 tahun 1992

Hall, Peter. 1992

Anderson, LT. 1995

SESSION OUTLINE PLAN

SUBJECT	:STUDIO PLANNING PROCCES
CODE NUMBER/	:TKP 212 P/4 SEMESTER CREDIT UNIT
TIME MEETING SCHEDULE	:120 meanutes
MEETING	:SECOND (2 nd)
A. PURPOSING	
GENERAL INSTRUCTIONAL PURPOSING	:After finishing this subject for one semester, college student are wished to get expariance in planning procces activities and having an ability to applicate urban and regional planning procces, specially on: 1. Planning some activities and their steps which is needed for applicating urban and regional planning activities. 2. Doing some steps of urban and regional planning activities according to urban and regional growth issues in Indonesia 3. Identify and invite public participation elements also stakeholders in urban and regional planning activities according to urban and regional growth issues in Indonesia which had identified before.
SPECIFIC INSTRUCTIONAL PURPOSING	:After following this subject, college students are expected to understand urban and regional planning procces and methods, also public participation and stakeholders methods in urban and regional planning activities which is realized by proposal technic making.
B. MAIN STUDY	:Planning Procces And Public Participation In Urban And Regional Planning Activities.
C. SUB MAIN STUDY	:1. Reviewing Planning Procces And Public Participation In Urban and Regional Planning Activities. - Urban And Regional Planning Procces - Urban And Regional Planning Problems.

- Public Participation In Urban And Regional Planning Activities.
- Stakeholders And Their Existency In Urban And Regional Planning Activities.

2. Class Discussion And Team Work Discuse About:
- Estimation Schema And List Planned Region Problems (Specific And General Problems) Based On Observation And Analysis Result.
-Estimation Stakeholders Participation

5. Task :
- Observation Urban And Regional Planning Problems.
- Stakeholder Identification
- Making Planned Region Base Map.

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background	1.Explaining second meeting matery (GIP and SIP)	Paying attention	-
2.	Preservation	2. Reviewing planning procces and public participation in urban and regional planning activities. - urban and regional planning procces - urban and regional planning problems. - public participation in urban and regional planning activities. -stakeholders and their existence in urban and regional planning activities. 3. class Discussion and team work discuse about:	Discusion class	OHP/LCD and white board Also Checklist stakeholders and problems

SESSION OUTLINE PLAN

SUBJECT	:STUDIO PLANNING PROCCES
CODE NUMBER/ SEMESTER CREDIT UNIT	:TKP 212 P/4 SEMESTER CREDIT UNIT
TIME MEETING SCHEDULE	:120 meanutes
MEETING	:THIRD , FORTH, FIFTH, SIXTH, SEVENTH
A. PURPOSING	
GENERAL INSTRUCTIONAL PURPOSING	:After finishing this subject for one semester, college student are wished to get expariance in planning procces activities and having an ability to applicate urban and regional planning procces, specially on: 1. Planning some activities and their steps which is needed to applicate urban and regional planning activities. 2. Doing some steps of urban and regional planning activities according to urban and regional growth issues in Indonesia 3. identify and invite public participation elements also stakeholders in urban and regional planning activities according to urban and regional growth issues in Indonesia which had identified before.
SPECIFIC INSTRUCTIONAL PURPOSING	:After following this subject, college students are expected to understand urban and regional planning procces and methods, also public participation and stakeholders methods in urban and regional planning activities which is realized by proposal technic making.
B. MAIN STUDY	:Planning Procces And Public Participation In Urban And Regional Planning Activities.
C. SUB MAIN STUDY	:1. Reviewing planning procces and public participation in urban and regional planning activities. 2.Discussion class and team work discuse about: - Identification specific and general problems

6.Opeenheim, N, 1980. Applied Models of Urban and Regional Analysis. New York: Prentice-Hall.

7.Patton, CV .dan DS Sawicki. 1993. Basic Methods of Policy Analysis and Planning. Englewood Cliffs: Prentice Hall.

8.Rietbergen-McCraken, J. And D. Narayan. 1998. Participation and Social Assesment. Washington DC: the World Bank.

9.Torado. 1997. Pembangunan Ekonomi dunia Ketiga

10.UU No. 24 dan No.4 tahun 1992.

11.Warpani, Suwardjoko. 1981. Analisis Wilayah dan Kota. Bandung: Penerbit ITB.

	stakeholders, in region planed.				
13.		▪ FGD plan forming ▪ FGD application.	▪ FGD (Focus Group Discussion) application.	240'	
14.	▪ After following this subject, college students are expected to form the plan of urban and regional development planning (plan for planning) which will be realised by final studio planning process report.	▪ Make the final report	▪ Explaining the final report forming.	120'	
			▪ Discussion and working on team to Make the final report	120'	
15.		▪ Make the final report	▪ Discussion and working on team to Make the final report ▪ Review of all studio process working.	240'	

REFERENCY:

1.Alexander, ER. 1992. Approach to Planning: Introducing Current Planning Theories, Consept and Issues. Milwaukee: Gordon and Breach Science Publisher.

2.Anderson, LT. 1995. Guidelines for Preparing Urban Plans. Wahington DC: Planners Press.

3.Conyer, D. Dan P. Hill. 1984. An introduction to Development Planning in the Developing Countries. New York: John Willey & Sons.

4.Hall, P. 1992. Urban and Regional planning. Routledge.

5.Kelly, K. Dan B. Becker. 2000. Community Planning: an Introduction to Comprehensive Plan. Washington DC: Island Press.

		- Estimation schema and list planned region problems (specific and general problems) based on observation and analysis result. -Estimation stakeholders participation		
3.	Clossing	4. Task : -Observation Urban And Regional Planning Problems. - Stakeholder Identification - Making planned region base map.	Do the job	-

E. EVALUATION : -

F. REFERENSI

3.		▪ Planning procces and public paticipation in urban and regional planning.	▪ Review of Planning procces and public paticipation in urban and regional planning: - Urban And Regional Planning Problem (Specific And General Problems and sbstansive or localisation problems.). - Problems identifying methods (observation method, data and information methods, confirmation merhods) - Stakeholder analizys	120'	
			▪ Discussion Class And Team Work Discuse About: - Identifying Urban And Regional Planning	120'	

			Problem (Specific And General Problems) - Developing Urban And Regional Planning Problems scema. - Stakeholder analizys (stakeholder identification, stakeholder influence identification, stakeholder assignment identification, stakeholder participation methods) ▪ Task: - to continue and to finish the discusion class		
4.		▪ proposal technic and survey design ▪ proposal technic making.	1. Proposal technis and survey design explaination. - Background. - Problems Estimation - Problems And Mathery Boundary. - Data Requairment Identification - Design Survey. - Schedule And Organiation Practice.	120'	
			2. class Discussion and working on team to form proposal technis: - Identification And Proposal Technis Points Aggriment. - Background Outline Forming - Referency Outline Forming - Practising Methods Outline Forming - Practising Methods	120'	

			Outline Forming 3. Task: to continue and to finish proposal technis forming.		
5.			5.Design Survey Explanation. - Data Requairment Identification. - Data Characterizing Includes: data variety, unit data, data quality, data resources, ect. - Data Collecting Methods. - Data Collecting Tools/ Instruments. - Design Survey. - Practising Organisation.	120'	
			6. Discusion class and working team to form design survey. - Requairment identification data, varietys data, unit data, quality data , resources data , ect. - data collecting tools/ instruments forming. - design survey forming. - schedule and organiation practice. - cost estimation forming. 7.Task: to continue and to finish proposal technis forming.	120'	
6			**Proposal tecknis and design survey presentation.** ▪ Review and back feed to proposal tecknis and	240'	

			design survey. ▪ Discusion class and working on team to fix proposal tecknis and design survey		
7.			▪ Review and back feed to proposal tecknis and design survey	120'	
			▪ class Discusion and working on team to fix proposal tecknis and design survey. ▪ Data collecting/ survey preparation.	120'	
8.	After following this subject, college students are expected to do obeservation, including survey primer, analising, interview stakeholder, and collecting stakeholder data.	▪ Survey and data compilation.	▪ Survey (obeservation, questioner spreading, and interview) ▪ Verification / data compilation	240'	
9.	▪ After following this subject, college students are expected to form Compilation and analysis data and show the result	▪ Compilation and analysis data. ▪ Compilation and analysis data result.	▪ Explaining Compilation and analysis data. - Data compilation - Review of planning problems which was identified before - Review of vision and mission - Data analysis frame. ▪ Explaining Data analysis	120'	

	sistematicly.		- Data compilation. ▪ Review of planning problems which was identified before		
			▪ class Discusion and working on team to make Compilation and analysis data. 7.Task: to continue and to finish Compilation and analysis data.	120'	
10.		▪ Compilation and analysis data. ▪ Compilation and analysis data result.	▪ class Discussion and working on team to continue Compilation and analysis data. - Formulating descriptions(promblems - alternative action plan) ▪ Task: to continue and to finish Compilation and analysis data	120'	
11.		▪ Compilation and analysis data. ▪ Compilation and analysis data result.	▪ Presentation of Compilation and analysis data result. ▪ Fixing the Compilation and analysis data result to FGD(Focus Group Discussion)	240'	
12	▪ After following this subject, college students are expected to form and apllicate FGD(Focus Group Discussion) on planning problems with	▪ FGD forming ▪ FGD application..	▪ Discussion and working on team to prepare FGD and deciding problems and alternative action plan priority based on public opinion (stakeholders) from FGD process.	240'	

- Estimation schema and list planned region problems (specific and general problems) based on observation and analize result.

-Estimation stakeholders participation/ stakeholder analize (stakeholder identification, stakeholder influence identification, stakeholder assignment identification, stakeholder participation methods estimation)

3. Proposal technic and design survey explaination:

- Background.
- Problems Estimation
- Problems And Mathery Boundary.
- Data Requairment Identification
- Design Survey.
- Schedule And Organiation Practice.

4. class Discusion and working on team to form proposal technis.

- Identification And Proposal Technis Points Aggriment.
- Background Outline Forming
- Referency Outline Forming
- Practising Methods Outline Forming
- Cost Estimation Forming

5. Design Survey Explanation.

- Data Requairment Identification.
- Data Characterizing Includes: varieties data, unit data, quality data, resources data, ect.
- Data Collecting Methods.
- Data Collecting Tools/ Instruments.
- Design Survey.
- Practising Organisation.

6. class Discusion and working team to form design survey.

-data requairment identification, varieties data, unit data, quality data, resources data, ect.

- data collecting tools/ instruments forming.

- design survey forming.
- schedule and organiation practice.
- cost estimation forming.

7. Duty/ Task: to continue and complite the design survey forming.

8.Proposal tecknis and design survey presentation.
- Review and feed back to proposal tecknis and design survey
- class Discusion and working on team to fix proposal tecknis and design survey
- Review and back feed to proposal tecknis and design survey
- class Discusion and working on team to fix proposal tecknis and design survey
- Data collecting/ survey preparation.

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background			
2.	Preservation	Reviewing planning procces and public participation on urban and regional planning. -Reviewing urban and regional planning problems. (specific and general problems on lacation or matery). -Problems idenfication methods (observation methods, data analizes and information methods, confirmation methods) Explaining proposal teknis and design survey - background. - problems estimation - problems and matery		

		boundary. - data requairment identification (primer and secunder) - teory referency learning. - design survey - schedule and organiation practice.		
3.	Clossing	to continue and complite the design survey forming		

E. EVALUATION :

F. REFERENSI

SESSION OUTLINE PLAN

SUBJECT :RESEARCH METODOLOGY

CODE NUMBER/ SEMESTER CREDIT UNIT :TKP 403 / 3 SEMESTER CREDIT UNIT

TIME MEETING SCHEDULE :2X 60 meanutes

MEETING :FIRST

A. PURPOSING

GENERAL INSTRUCTIONAL PURPOSING :After finishing this subject, college student are wished to form Research proposal into good structure, sistematic, and following the filosophys behind.

SPECIFIC INSTRUCTIONAL PURPOSING :

After following this subject, college students are expected for identifiying Research needs on urban and regional planning activities.

B. MAIN STUDY : introduction.

C. SUB MAIN STUDY :1. Research Metodology Position In Others Subject ex: Planinng Problems, seminar-kolokium and Final Project

2. Research Characteristic on Urban And Regional Planning Activities.

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background	1.Explaining first matery	Paying attention	-
		2.Explaining the benefits of learning Research requairment on urban and regional planning activities.	Paying attention	-
		3.Explaining competention which is resulted after learning this subject.	Paying attention	-
2.	Preservation	4. Explaining Research position among others.	Giving opinion	LCD and white board

		a.Asking students understanding about definition and regional consepts.		
		b. Writing the answears on white board.	-	
		c. Conclusing and explaining Research position among others.	Paying attention	
		5. Explaining Research characteristic on urban and regional planning activities.: a. Asking students some problems which needs Research metodology.	Giving opinion	LCD and white board
		b. Writing the answears on white board.	-	
		c. Conclusing and explaining some problems which needs Research metodology.	Paying attention	
3.	Clossing	7. Close the meeting: a. Asking students to explain again the materys which was be accepted by students.	Little explanation	-
		b. Inviting all or anothers studentas to give an opinion or ides to comment their friends opinion or ideas.	Giving opinion	
		c. explaining next subject	Paying attention	
		d. Giving a task for students to make summary from further readings books.	Paying attention	

E. EVALUATION :

F. REFERENSI :

SESSION OUTLINE PLAN

SUBJECT : RESEARCH METODOLOGY

CODE NUMBER/ SEMESTER CREDIT UNIT :TKP 403 / 3 SEMESTER CREDIT UNIT

TIME MEETING SCHEDULE :2X 60 meanutes

MEETING :SECOND

B. PURPOSING

GENERAL INSTRUCTIONAL PURPOSING :After finishing this subject, college student are wished to form Research proposal into good structure, sistematic, and follow the filosophys .

SPECIFIC INSTRUCTIONAL PURPOSING :After following this subject, college students are expected to explain foundation and prosedure on Research developing.

B. MAIN STUDY :Human Inquity And Getting Truth Procces.

C. SUB MAIN STUDY :1. Phylosophy and Knowledge Resources.
2. Truth criteria, and Getting Truth Procces.
3. Truth Scientific Knowlegde Obstructure.

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background	1.Explaining second matery	Paying attention	-
		2.Explaining the benefits of learning foundation and prosedure on Research developing.	Paying attention	-
		3.Explaining competention which is resulted after learning this subject.	Paying attention	-
2.	Preservation	4. Explaining Phylosophy and knowledge resources. a.Asking students understanding about knowledge, knowledge	Giving opinion	LCD and white board

		resources and how to get scientific knowledge.		
		b. Writing the answears on white board.	-	
		c. Conclusing and explaining knowledge, knowledge resources and how to get scientific knowledge.	Paying attention	
		5. Explaining truth criteria, and getting truth procces. : a. Asking students about definition concept and forms of the truth.	Giving opinion	LCD and white board
		b. Writing the answears on white board.	-	
		c. Asking students about truth criteria, and getting truth procces	Giving opinion	
		d. Writing the answears on white board	-	
		e. Conclusing and explaining definition concept and forms of the truth and also about truth criteria, and getting truth procces.	Paying attention	
		6. Explaining truth scientific knowlegde obstructure. a. Explaining truth scientific knowlegde concept.	Paying attention	LCD and white board
		b. Asking students about truth scientific knowlegde obstructure.	Giving opinion	
		c. Writing the answears on white board	-	
		d. Conclusioning and	Paying attention	

		explaining truth scientific knowlegde obstructure.		
3.	Clossing	7. Close the meeting: a. Asking students to explain again the materys which was be accepted by students.	Little explanation	-
		b. Inviting all or anothers studentas to give an opinion or ides to comment their friends opinion or ideas.	Giving opinion	
		c. Explaining next subject	Paying attention	
		d. Giving a task for students to make summary from further readings books.	Paying attention	

E. EVALUATION : college studenrs are expected to make resume from matery which was given in a team, and explain it back in class as clossing meeting. Presenentator team will be choos randomly on every meeting.

F. REFERENSI :

1.Babbie, E. 1986. The Practice of Social Researh. 4th Edition. Belmont: Wadsworth Publishing. Chapter 1, pp 5-16.

2. Muhadjir, N 2001. Filsafat Ilmu: Positivesme, Post Positivisme. Edisi II. Yogyakarta: Rake Sarasin. Bagian 1 halaman 11-22.

3. Smith, H.W. 1991. Strategies as Social Research .3rd Edition. Orlando: Holt, Rinehart and Winston, Inc, Chapter 1, pp. 20-30.

4. Suriasumantri, J. 1990. Filasafat Ilmu. Bandung : Penerbit ITB. Bab 1, halaman 19-38, bab 4-5 halaman 50-59.

5. True, J.A. 1989. Finding Out: Conduction and Evaluation Social Researh. 2nd Edition. Belmont: Wadsworth Publishing. Chaptee 1, pp 13-25.

SESSION OUTLINE PLAN

SUBJECT :RESEARCH METODOLOGY

CODE NUMBER/ SEMESTER CREDIT UNIT :TKP 403 / 3 SEMESTER CREDIT UNIT

TIME MEETING SCHEDULE :2X 60 meanutes

MEETING :THIRD

C. PURPOSING

GENERAL INSTRUCTIONAL PURPOSING :After finishing this subject, college student are wished to form research proposal into good structure, sistematic, and follow the filosophys behind them.

SPECIFIC INSTRUCTIONAL PURPOSING :After following this subject, college students are expected to explain foundation and prosedure on knowledge developing.

B. MAIN STUDY :knowledge prosedure forming..

C. SUB MAIN STUDY :1.knowledge foundation and theory construction.

2. deductive and inductive logical on developing theory.

3. scientific and theory relation.

4.knowledge methoda prosedure.

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background	1.Explaining third matery	Paying attention	-
		2.Explaining the benefits of foundation learning and prosedure on knowledge developing.	Paying attention	-
		3.Explaining competention which is resulted after learning this subject.	Paying attention	-
2.	Preservation	4. explaining knowledge foundation and theory construction. a.Asking students understandaing about last matery.	Giving opinion	LCD and white board

		b. explaining knowledge foundation and theory construction	Paying attention	
		5. Explaining deductive and inductive logical on developing theory. a. Asking students about deductive and inductive logical on developing theory	Paying attention	LCD and white board
		b. Writing the answears on white board.	Giving opinion	
		c. Conclusioning and explaining definition concept and forms of the truth and also about truth criteria, and getting truth procces.	Paying attention	
		6. explaining knowledge and theory relation. . a. asking the definition of knowledge and theory relation.	Giving opinion	LCD and white board
		b. Writing the answears on white board	-	
		c. Conclusioning and explaining knowledge and theory relation..	Paying attention	
		7. explaining knowledge methoda prosedure. a.Asking students about knowledge methoda prosedure.	Giving opinion	LCD and white board
		b. Writing the answears on white board	-	
		c. Conclusioning and explaining knowledge methoda prosedure.	Paying attention	

3.	Clossing	8. Clossing meeting: a. Asking students to explain again the matheries which was be accepted by students.	Little explanation	white board
		b. explaining next subject	Paying attention	
		c. Giving a task for students to make summary from further readings books.	Paying attention	

E. EVALUATION : college students are expected to make resume from matery which was given in a team, and explain it back in class as clossing meeting. Presenentator team will be choos randomly on every meeting.

F. REFERENSI

1.Babbie, E. 1986. The Practice of Social Researh. 4th Edition. Belmont: Wadsworth Publishing. Chapter 1, pp 5-16.

2. Muhadjir, N 2001. Filsafat Ilmu: Positivesme, Post Positivisme. Edisi II. Yogyakarta: Rake Sarasin. Bagian 1 halaman 11-22.

3. Smith, H.W. 1991. Strategies as Social Research .3rd Edition. Orlando: Holt, Rinehart and Winston, Inc, Chapter 1, pp. 20-30.

4. Suriasumantri, J. 1990. Filasafat Ilmu. Bandung : Penerbit ITB. Bab 1, halaman 19-38, bab 4-5 halaman 50-59.

5. True, J.A. 1989. Finding Out: Conduction and Evaluation Social Researh. 2nd Edition. Belmont: Wadsworth Publishing. Chaptee 1, pp 13-25.

SESSION OUTLINE PLAN

SUBJECT	: REGIONAL PLANNING
CODE NUMBER/SEMESTER CREDIT UNIT	: TKP 208/3 SEMESTER CREDIT UNIT
TIME MEETING SCHEDULE	: 2 X 60 meanutes
MEETING	: FIRST (1 st)
A. PURPOSING	
GENERAL INSTRUCTIONAL PURPOSING	: After finishing this subject, college student are wished to explain the position of regional planning scient among regional planning scient others and also applicate principes and models of regional development planning into establishing requairment.
SPECIFIC INSTRUCTIONAL PURPOSING	: After following this subject, college students are expected to explain definition and domain-range of regioanal development planning.
B MAIN STUDY	: Introductions
C SUB MAIN STUDY	: 1.Definition and Regional Consepts 2.Region and Clasic-Contemporer Regional System, 3.Connectivity between Regional Planning and City-Sectoral Planning.

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background	1.Explaining first mathery	paying attention	-
		2.Explaining the benefits of learning definition and domain-range of regioanal development planning.	paying attention	-
		3.Explainining competention which is resulted after learning this subject.	paying attention	-
2.	Preservation	4.Explaining Definition and regional consepts: a.Asking students understanding about	Giving Opinions	LCD and white board

		definition and regional consepts.		
		b. Writing the answears on white board.	-	
		c. Conclusing and explaining the definition and regional consepts.	paying attention	
		5. Explaining domain-range of region and clasic-contemporer regional system : a. Asking students understanding about domain-range of region and clasic-contemporer regional system.	Giving Opinions	LCD and white board
		b. Writing the answears on white board	-	
		c. Conclusing and explaining the domain-range space of region and clasic-contemporer regional system.	paying attention	
		6. Explaining connectivity between regional planning and city-sectoral planning. a. Asking students understanding about connectivity regional planning and city-sectoral planning.	Giving Opinions	LCD and white board
		b. Writing the answears on white board	-	
		c. Conclusing and explaining connectivity between regional planning and city-sectoral planning.	paying attention	
3.	Clossing	7. close the meeting: a. Asking students to	Little explanation	

		explain again the matherys wich was been accepted by students.		
		b. Inviting all or another students to give an opinion or ides to comment their friends opinion or ideas.	Giving Opinions	-
		c. explaining next subject	paying attention	
		d. Giving a task for students to make summary from further readings books.	paying attention	

E. EVALUATION :

F. REFERENSI :

1. Bingham, R.D and R. Mier (eds). 1993. ***Theories of Local Economi Development: Perspectives From Across the Diciplines.*** Newbury Park: Sage Publication Inc. Chapter 2, pp.27-57.
2. Clark, G. 1986. Regional Planning in Developing Countrie: A Consultant's Perspective. ***Regional Studies.*** Volume 20(6). Pp. 584-590.
3. Conyer, D. 1984. Bridging the Gap Between North and South: Towards a Common Appoach to Intra –Redional Planning. ***Third World Planning Review.*** Volume 6 (4). Pp.339-361.
4. Friedmann, J. And W. Alonso (eds.). 1975. ***Regional Policy: Reading in Theory and Applications.*** Cambridge:The MIT Press. Chapter 3, pp.64-96, Chapter 37, pp. 791-808.
5. Glasson, J. 1978. ***Introduction to Regional Planning.*** 2nd Edition. London: Hutchinson & Co. Ltd. Chapter 1-2, pp. 17-62.
6. Gore,C.1984. ***Regions in Question: Space, development Theory and Regional Policy.*** London: Methuen & Co. Ltd. Introduction & chapter 1-2,pp. 1-78, Chapter 6, pp. 175-210.
7. Haeruman, H. 1998. review of Regional Development Policies and Prospectives for Repelita VII. ***Regional Development Dialogue.*** Volume 19(2).pp. 112-121.
8. Hill,H.1998. The Challenge of Regional Development in Indonesia. ***Australian journal of International Affairs.*** Volume 52(1). Australian Institute of International Affairs.pp. 19-34.
9. Ibrahim, A.M. and H.B. Fisher. 1979. Regional Development Studies and Planning in Indonesia. ***Bulletin of Indonesian Economic Studies***. Volume 15. pp. 113-127.

10. Kim, T.j., G. Knapp and I.J. azis (eds.). 1992. ***Spatial Development in Indonesia: Review and Prospects.*** Aldershot: Avebury. Chapter 3, pp. 71-89.

11. Prantilla, E.B. (ed) . 1981. ***National development and Regional Policy.*** Nagoya: UNCRD. Chapter 1-2,pp. 1-55, Chapter 5, pp. 85-99.

SESSION OUTLINE PLAN

SUBJECT : REGIONAL PLANNING

CODE NUMBER/ SEMESTER CREDIT UNIT : TKP 208 / 3 SEMESTER CREDIT UNIT

TIME MEETING SCHEDULE : 2 X 60 meanutes

MEETING : SECOND (2 nd)

A. PURPOSING

GENERAL INSTRUCTIONAL PURPOSING : After finishing this subject, college student are wished to explain the position of regional planning scient among regional planning scient others and also applicate principes and models of regioanal development planning into establishing requairment.

SPECIFIC INSTRUCTIONAL PURPOSING : After following this subject, college students are expected to explain base theories, consepts, and strategy of regional development.

B. MAIN STUDY : Regional Growth.

C. SUB MAIN STUDY : Equal Growth vs Unequal Growth

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background	1.Explaining second mathery	paying attention	-
		2.Explaining the benefits on learning theories, concepts, and strategy of regional development.	paying attention	-
		3.Explainining competention which will be resulted after learning this subject.	paying attention	-
2.	Preservation	4.Explaining regional growth theory debate. : a.Asking students understanding about Equal Growth and Unequal Growth concept.	Giving Opinions	LCD and white board
		b. Writing the answears on white board.	-	

		c. Conclusing and explaining Equal Growth and Unequal Growth	paying attention	
3.	Clossing	7. close the meeting: a. Asking students to explain again the matherys which was been accepted by students.	Little explanation	-
		b. Inviting all or another students to give an opinion or ides to comment their friends opinion or ideas.	Giving Opinions	
		c. explaining next subject	paying attention	
		d. Giving a task for students to make summary from further readings books (referency books).	paying attention	

E. EVALUATION : -

F. REFERENSI : 1. Friedmann, J. And W. Alonso (eds.). 1975. ***Regional Policy: Reading in Theory and Applications.*** Cambridge:The MIT Press. Chapter 12-14, pp. 307-357.

2. Gore, C. 1984. ***Regions in Question: Space, Development Theory and regional Policy.*** London: Methuen & Co. Ltd. Chapter 4. pp. 118-145.

3.Jhingan,M.L. 2000. ***Ekonomi Prmbangunan dan Perencanaan.*** (terjamahan). Jakarta: PT raja Grafindo Persada. Bab 18-19, hal. 182-200.

4. Simon, D. (ed). 1990. ***Third World Regional Development: A Reappraisal.*** London: Paul Chapman Publishing Ltd. Chapter 1, pp. 3-23.

5. Stohr,W.B. and D.R.F. Taylor (eds). 1981. ***Development from above or below?: The Dialectis of Regional planning in Developing Countries.*** Chichester: Jonh Wiley and sons Ltd. Chapte 3, pp. 73-105.

SESSION OUTLINE PLAN

SUBJECT	: REGIONAL PLANNING
CODE NUMBER/SEMESTER CREDIT UNIT	: TKP 208 / 3 SEMESTER CREDIT UNIT
TIME MEETING SCHEDULE	: 2 X 60 meanutes
MEETING	: THIRD (3 rd)
A. PURPOSING	
GENERAL INSTRUCTIONAL PURPOSING	: After finishing this subject, college student are wished to explain the position of regional planning scient among regional planning scient others and also applicate principes and models of regioanal develovment planning into establishing requairment.
SPECIFIC INSTRUCTIONAL PURPOSING	: After following this subject, college students are expected to explain base theories, consepts, and strategy of regional development.
B. MAIN STUDY	: Growth's Paradigm
C. SUB MAIN STUDY	: 1. Growth Pole 2. Spread Effects and Backwash Effect 3. Cumulative Caucation Rule 4. Centre-Periphery Region.

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background	1.Explaining third mathery	paying attention	-
		2.Explaining the benefits of learning base theories, consepts, and strategy of regional development.	paying attention	-
		3.Explainining competention which is resulted after learning this subject.	paying attention	-
2.	Preservation	4.Explaining growth pole consepts: a.Asking students	Presentation and discusion.	

		understanding about growth pole consepts.		LCD and white board
	hhfgjh	b. Conclusing and explaining growth pole consepts.	paying attention	
		5. Explaining Spread effects and backwash consepts : a. Asking students understanding about Spread effects and backwash consepts.	Presentation and discusion	LCD and white board
		b. Conclusing and explaining Spread effects and backwash consept	paying attention	
		6. Explaining Cumulative caucation rule consepts. a. Asking students understanding about Cumulative caucation rule consepts.	Presentation and discusion	LCD and white board
		b. Conclusing and explaining Cumulative caucation rule consepts.	paying attention	
		7. Explaining Centre-periphery region Consept: a. Asking students understanding about Centre-periphery region Consept	Presentation and discusion	LCD and white board
		b. Conclusing and explaining Centre-periphery region Consept	paying attention	
3.	Clossing	7. close the meeting: a. Asking students to	Little explanation	

		explain again the matherys wich was be accepted by students.		
		b. Inviting all or another students to give an opinion or ides to comment their friends opinion or ideas.	Giving Opinions	-
		c. explaining next subject	paying attention	
		d. Giving a task for students to make summary from further readings books.	paying attention	

E. EVALUATION : -

F. REFERENSI : 1. Friedmann, J. And W. Alonso (eds.). 1975. ***Regional Policy: Reading in Theory and Applications.*** Cambridge:The MIT Press. Chapter 25-26-14, pp. 539-587.

2. Glasson, J. 1978. ***Introduction to Regional Planning.*** 2nd Edition. London: Hutchinson & Co. Ltd. Chapter 8, pp. 171-191.

3. Gore, C. 1984. ***Regions in Question: Space, Development Theory and regional Policy.*** London: Methuen & Co. Ltd. Chapter 3. pp. 81-117.

4. Lo, F. An K. Salih (eds.). 1978. ***Growth Pole Strategy and Regional Devepment policy: Asian Experiences and Alternative Approaches.*** Nagoya: UNCRD. Chapter 11, pp. 243-269.

5. Parr, J.B. 1999. Growth-pole Strategies in Regional Economic Planning: A Retrospective View: Part 2. Implementation and Outcome. ***Urban Studies.*** Volume 36 (8). Pp. 1247-1268.

7. Stohr,W.B. and D.R.F. Taylor (eds). 1981. ***Development from above or below?: The Dialectis of Regional planning in Developing Countries.*** Chichester: Jonh Wiley and sons Ltd. Chapte 1, pp. 15-38.

SESSION OUTLINE PLAN

SUBJECT	: **PLANNING INFORMATION SYSTEM**
CODE NUMBER/ SEMESTER CREDIT UNIT	: TKP 210 /3 SEMESTER CREDIT UNIT
TIME MEETING SCHEDULE	: 120 meanutes
MEETING	: FIRST (1 st)
A. PURPOSING	
GENERAL INSTRUCTIONAL PURPOSING	:1.Students could give the explaination about planning information system consepts in order to support planning activities. 2. Students could improve and make information system models for planning activities. 3. Improving base and technical ability on developing information system application in order to support planning activities.
SPECIFIC INSTRUCTIONAL PURPOSING	: After following this subject, college students are expected to understand attachment between technology information improvement and information system.
B. MAIN STUDY	:General history of background information system, and its attachment on planning activities.
C. SUB MAIN STUDY	:1. Study Explaination 2. Information Sytem Definition. 3. Planning Definition 4. Information Sytem Improvement History and Technology Information. 5. Connectivity between Information System and Planning Activities

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background	1.Explaining first mathery	Listening	OHP and white board

		2. Try to find out student basic ability and basic understanding about information system	Explaining basic teory information system,	white board
2.	Preservation	4.Explaining about information system definition and some important reasons of information system requairment today.	Listening	OHP and white board
		5. Explaining / refreshing about planning definition.	Listening	OHP and white board
		6. Explaining technology information influences according to information system.	Listening	OHP and white board
		7. Asking students about the different between technology information and information system, also try to asking some example technology information application in daily life.	Asking and give an opinion or ides to comment others ones	white board
3.	Clossing	8. Conclusing subject	writing	

E. EVALUATION : -

F. REFERENSI : 1. Edwards, Chris, John Ward & Andy Bytheway, (2000) ***The Essence of Information System,*** Yogyakarta, Penerbit Andi (bab 1 dan 2)

2. Goodchild Michael F., et all, (1993), ***Geographic Information System , Principles and Practics***, Essex, England, Longman scientific and Technical (Bab1)

3. Jonh C. A, Kay Brown, Petr L.C & Michael J. Kevany, (1991) ***Geographic Information*** System , Chapman and Hall . London.

SESSION OUTLINE PLAN

SUBJECT	: **PLANNING INFORMATION SYSTEM**
CODE NUMBER/ SEMESTER CREDIT UNIT	: TKP 210 /3 SEMESTER CREDIT UNIT
TIME MEETING SCHEDULE	: 120 meanutes
MEETING	: SECOND (2 nd)
A. PURPOSING	
GENERAL INSTRUCTIONAL PURPOSING	:1. Students could give the explaination about planning information system consepts in order to support planning activities. 2. Students could improve and make information system models for planning activities. 3. Improving basic and technical ability on developing information system application in order to support planning activities.
SPECIFIC INSTRUCTIONAL PURPOSING	: After following this subject, college students are expected to explain information system application in order to support planning activities.
B. MAIN STUDY	:Definition, Basic Information Sytem Consept,
C. SUB MAIN STUDY	:1.Definition and Information Sytem Basic Consept, 2.Definition and Geography Information Sytem Basic Consept, 3.Improvement Geography Information Sytem 4.Geography Information System for Local Goverment

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background	1. Asking student to explain last summary (first understanding about information system)	Explain last summary about information system.	white board
2.	Preservation	2.Explaining definition and basic concept of information system	Listening	OHP and white board
		3. Explaining components of information system.	Listening	OHP and white board
		4. Explaining definition and basic concept of geography information system, and components of geography information system .	Listening	OHP and white board
		5. Explaining technology information influences according to geography information system.	Listening	OHP and white board
		6. Explaining geography information system role in		OHP and white board

		order to support local goverment activities in many application.	Listening	
		7. asking some example geography information system application in daily life.	Asking and give an opinion or ides to comment others ones.	white board
3,	Clossing	8. Conclusing subject	writing	-

E. EVALUATION : -

F. REFERENSI : 1. Edwards, Chris, John Ward & Andy Bytheway, (2000) ***The Essence of Information System,*** Yogyakarta, Penerbit Andi (bab 3)

2. Burrough, Peter A & Rachael A. McDonnell, (1998), ***Principles of Geographical Information System,*** London, Oxford Press University (Bab 1)

3. Cakins, Hugh, et all, ***Local Goverment GIS Demonstration Grant***, New York, Natioal Center for Geographic Information and Analisis.

SESSION OUTLINE PLAN

SUBJECT	:**PLANNING INFORMATION SYSTEM**
CODE NUMBER/ SEMESTER CREDIT UNIT	:TKP 210 /3 SEMESTER CREDIT UNIT
TIME MEETING SCHEDULE	:120 meanutes
MEETING	:THIRD (3 rd)
A. PURPOSING	
GENERAL INSTRUCTIONAL PURPOSING	:1.Students could give the explaination about planning information system consepts in order to support planning activities. 2. Students could improve and make information system models for planning activities. 3. Improving basic and technical ability on developing information system application in order to support planning activities.
SPECIFIC INSTRUCTIONAL PURPOSING	: After following this subject. college students are expected to explain technology information and information system application in order to support planning activities.
B. MAIN STUDY	:Definition, Basic Information Sytem Consept,
C. SUB MAIN STUDY	:1.Technology Information Sytem Influences According To Information System Model And Requairment. 2. Technology Information Application to Support Public Participation In Planning Activities.

D. EDUCATION ACTIVITIES

NO	STEPS	LECTURER ACTIVITIES	STUDENTS ACTIVITIES	MEDIATOR AND EDUCATION TOOLS
1.	Background	1.Explaining definition of technology information system 2. Explaining technology information system improvement history.	Listening	OHP and white board
2.	Preservation	3.Explaining technology information sytem influences according to information system models and requairment.	Listening	OHP and white board
		4. Giving some examples of technology information system and information system models usefull in planning activities.	Listening	OHP and white board

		5. Explaining technology information application to support public participation in developed countries planning activities.	Listening	OHP and white board
3,	Clossing	8. Conclusing subject	writing	-

E. EVALUATION : -

F. REFERENSI : 1. Goodchild Michael F., et all, (1993), ***Geographic Information System , Principles and Practics***, Essex, England, Longman scientific and Technical (Bab1)

2. Laurini, Robert (2001), ***Information Sytem for Urban Planning: A Hypermedia Cooperative Approach,*** London, Taylor and Francis Inc.