
 Universitas Airlangga	SEMESTER LEARNING PLAN		Prepared by	Examined by	Approved by	Document Registration Number
	SLP		(Person in Charge)	(Head of Bachelor Program / Head of Department)	Vice Dean I	01/S1Kesmas/RPS/2019
	Revision - Date	January 1 st , 2019	Dr. Hari Basuki N., dr., M.Kes	Dr. Diah Indriani, S.Si., M.Si	Dr. Santi Martini, dr., M.Kes	
Faculty of Public Health	Valid on Semester (odd/even) / Academic Year	Odd Semester 2019/2020	(sign)	(sign)	(sign)	

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A. DETAILS OF COURSE


1. Course Name	Application of Research Methodology (Biostatistics and Populations Studies)
2. Course Code	PNM496
3. Credits (SKS)	2 (two) SKS
4. Semester / Term	VII (seventh)
5. Study Program	Bachelor of Public Health
6. Student Learning Achievement	After actively attending lectures in the teaching and learning process, students are expected to be able to identify, select and formulate research problems, understand the function of library research and formulate research objectives and hypotheses
7. Course Learning Achievement	Students are able to compile proposals and carry out research in the field of biostatistics and population, as well as conduct analysis of health problems using appropriate methods and various research designs
8. Course Description	This course's materials include: The analysis of public health and the practice of making research proposals starting from the formulation of the problem, setting goals, compiling a literature review, conceptual framework, hypotheses and research methods in the field of Biostatistics and Population
9. Course Prerequisites (if any)	None
10. Instructor	Dr. Hari Basuki N., dr., M.Kes
11. Teaching Assistants	1. Dr. Arief Wibowo, dr., M.S 2. Dr. Soenarnatalina M., Ir., M.Kes. 3. Dr. Rachmah Indawati, SKM., MKM. 4. Dr. Mahmudah, Ir., M.Kes. 5. Dr. Diah Indriani, S.Si., M.Si

B. TEACHING PROGRAM

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Week	Skills expected at the end of each learning phase (Sub-Course Achievement) (C, A, P)	Study Materials	Teaching Methods	Additional Materials for Learning	Meeting Time	Course Objectives	Criteria and Indicator of Evaluation / Measurable Learning Outcome (hard and soft skills)	Mark / Grade / Percent age (%)	Reference Number Ref. (number)
1	2	3	4	5	6	7	8	9	10
1	Students are able to compile proposals and carry out research in the fields of biostatistics and population, as well as conducting health problem analysis using appropriate methods and various research designs.	Introductory learning contract: 1. Introduction to learning 2. Introduction to Research Methodology	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility, Discipline and Analytical Ability		Book 1,2,3,4,5
2	Students are able to compile proposals and carry out research in the fields of biostatistics and population, as well as conducting health problem analysis using appropriate methods and various research designs.	Problems and Research Objectives: 1. Problem Determination 2. Problem Formulation 3. Formulation of Purpose	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility, Discipline and Analytical Ability		Book 1,2,3,4,5

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1	2	3	4	5	6	7	8	9	10
3	Students are able to compile proposals and carry out research in the fields of biostatistics and population, as well as conducting health problem analysis using appropriate methods and various research designs.	Conceptual Framework & Research Hypothesis: 1. Literature review 2. Compilation of the concept framework 3. Research Hypothesis Formulation	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility, Discipline and Analytical Ability		Book 1,2,3,4,5
4	Students are able to compile proposals and carry out research in the fields of biostatistics and population, as well as conducting health problem analysis using appropriate methods and various research designs.	Research Type and Design: 1. Determination of Research Type 2. Selection of Research Design	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility, Discipline and Analytical Ability		Book 1,2,3,4,5

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5	Students are able to compile proposals and carry out research in the fields of biostatistics and population, as well as conducting health problem analysis using appropriate methods and various research designs.	Population and Samples: 1. Determination of Population and Samples 2. Sampling Technique	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility, Discipline and Analytical Ability		Book 1,2,3,4,5
6	Students are able to compile proposals and carry out research in the fields of biostatistics and population, as well as conducting health problem analysis using appropriate methods and various research designs.	Population and Samples: Application Determination of sample size	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility, Discipline and Analytical Ability		Book 1,2,3,4,5
7	Students are able to compile proposals and carry out	Variable:	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility,		Book 1,2,3,4,5

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	research in the fields of biostatistics and population, as well as conducting health problem analysis using appropriate methods and various research designs.	1. Determination of research variables and classification of variables 2. Definition of Variable Operations					Discipline and Analytical Ability		
MID TERM EXAMINATION									
8	Students are able to compile proposals and carry out research in the fields of biostatistics and population, as well as conducting health problem analysis using appropriate methods and various research designs.	Instrument Development: 1. Development of Research Instruments (Questionnaire)	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility, Discipline and Analytical Ability		Book 1,2,3,4,5
9	Students are able to compile proposals and carry out	Instrument Development:	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility,		Book 1,2,3,4,5

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1	2	3	4	5	6	7	8	9	10
	research in the fields of biostatistics and population, as well as conducting health problem analysis using appropriate methods and various research designs.	1. Testing Validity and Reliability of Instruments (Questionnaire)					Discipline and Analytical Ability		
10	Students are able to compile proposals and carry out research in the fields of biostatistics and population, as well as conducting health problem analysis using appropriate methods and various research designs.	Processing and analysis of data: 1. Descriptive Analysis	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility, Discipline and Analytical Ability		Book 1,2,3,4,5
11	Students are able to compile proposals and carry out research in the fields of biostatistics and population,	Processing and analysis of data: 1. Selection of Statistical Test	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility, Discipline and Analytical Ability		Book 1,2,3,4,5

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1	2	3	4	5	6	7	8	9	10
	as well as conducting health problem analysis using appropriate methods and various research designs.								
12	Students are able to compile proposals and carry out research in the fields of biostatistics and population, as well as conducting health problem analysis using appropriate methods and various research designs.	Data analysis: 1. Calculation of Risk Score	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility, Discipline and Analytical Ability		Book 1,2,3,4,5
13.	Students are able to compile proposals and carry out research in the fields of biostatistics and population, as well as conducting health problem analysis using	Presentation of Data and Analysis Results	Lectures Discussions	LCD and Whiteboard	2x50 minutes		Honesty, Responsibility, Discipline and Analytical Ability		Book 1,2,3,4,5

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1	2	3	4	5	6	7	8	9	10
	appropriate methods and various research designs.								
FINAL TERM EXAMINATION									

C. REQUIRED TEXTS / REFERENCES / ESSENTIAL READINGS

1. Babbie E, 2002. *The Practice of Social Research*. Wadsworth Publishing Co, USA
2. Cochran WG, 1977. *Sampling Techniques*. 3rd ed. John Wiley & Sons, USA
3. Lemeshow S, DW Hosmer Jr, J Klar, SK Lwanga, 1990. *Adequacy of Sample Size in Health Studies*. John Wiley & Sons, New York
4. Natsir M, 1988. *Metode Penelitian*. Ghalia Jakarta
Singarimbun M. dan Sofyan E. 1987. *Metode Penelitian Survey*. LP3ES