

**RENCANA PROGRAM DAN
KEGIATAN PEMBELAJARAN SEMESTER
(RPKPS)**



Epidemiology I

(Semester 1/3 SKS/KUI)

(Program Studi S2 Ilmu Kesehatan Masyarakat)

Oleh:

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**Universitas Gadjah Mada
Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan
2019**



Universitas Gadjah Mada

Fakultas Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan
Departemen/Program Studi S2 Ilmu Kesehatan Masyarakat

RENCANA PROGRAM DAN KEGIATAN PEMBELAJARAN SEMESTER (RPKPS)

Kode Mata Kuliah	Nama Mata Kuliah	Bobot (sks)	Semester	Status Mata Kuliah	Mata Kuliah Prasyarat
....	Epidemiology I	3	1	Core
Capaian Pembelajaran Lulusan (CPL) yang dibebankan pada MK	EPI1. Review and discuss of epidemiology, history and the challenges of modern epidemiology.				
	EPI2. Explain rationale and provide examples of application of epidemiology in assesing health status (surveillance), identify disease etiology (outbreak invetigation), disease control and prevention.				
	EPI3. Review and discuss case definition, role in comparing disease frequency and key aspect of measuring disease occurrence				
	EPI4. Review and analyze natural history of disease and how influence the disease control strategy				
	EPI5. Discuss application of herd immunity, population heterogeneity, reproductive rate and mode of transmission in disease control				
	EPI6. Discuss the causal guidelines proposed by Hill and demonstrate the measures of association				
	EPI7. Review and discuss on epidemiological study design and the key features of conducting each study				
	EPI8. Review and discuss of bias, confounding and methods for controlling the confounding				
	EPI9. Review and discuss the methods for evaluating effect measure modification and confounding and s relation between the measure association and effect measures modification				
	EPI10. Discuss key characteristic of disease appropriate for dianostic and screening and the application of health program				
	EPI11. Appraise epidemiology realated reports using STROBE and CONSORT				
	EPI12. Review and discuss realate current guideline and regulation for ethical conduct of epidemiologic research involving human subjects				
	Capaian Pembelajaran Mata Kuliah (CPMK)	CPMK1	Overview and history of Epidemiology		
CPMK2		Application of epidemiology in public health practice			
CPMK3		Measuring and comparing disease frequency			
CPMK4		Tutorial measuring disease frequency I			
CPMK5		Tutorial measuring disease frequency 2			
CPMK6		Natural history of diisease and level of prevention			
CPMK7		Dynamic of disease transmission and reproductive rate			
CPMK8		Tutorial public health surveillence and outbreak investigation			
CPMK9		Epidemiology approach to association and causation			
CPMK10		Tutorial measuring associaton			
CPMK11		Epidemiology study design: introduction, observational and experimental study design I			
CPMK12		Epidemiology study design: introduction, observational and experimental study design II			
CPMK13		Epidemiology study design: introduction, observational and experimental study design III			
CPMK14		Tutorial epidemiological study design: observational study design			
CPMK15		Bias and confounding			
CPMK16		Effect measures modification			
CPMK17		Tutorial bias confounding and modification effect I			
CPMK18		Tutorial bias confounding and modification effect 2			
CPMK19		Tutorial effect and impact public health intervention			
CPMK20		Diagnostic and screening			
CPMK21		Tutorial public health screening			
CPMK22		Reading epidemiological paper (critical appraisal)			
CPMK23		Tutorial appraisal epidemiology paper			

	CPMK24	Ethical and professionals issues in epidemiology
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Pemetaan CPL dengan CPMK		<table border="1"> <thead> <tr> <th></th> <th>CPMK</th> <th>EPI1</th> <th>EPI2</th> <th>EPI3</th> </tr> </thead> <tbody> <tr><td>1</td><td>Overview and history of Epidemiology</td><td>✓</td><td></td><td></td></tr> <tr><td>2</td><td>Application of epidemiology in public health practice</td><td></td><td>✓</td><td></td></tr> <tr><td>3</td><td>Measuring and comparing disease frequency</td><td></td><td></td><td>✓</td></tr> <tr><td>4</td><td>Tutorial measuring disease frequency I</td><td></td><td></td><td>✓</td></tr> <tr><td>5</td><td>Tutorial measuring disease frequency 2</td><td></td><td></td><td>✓</td></tr> <tr><td>6</td><td>Natural history of disease and level of prevention</td><td></td><td></td><td></td></tr> <tr><td>7</td><td>Dynamic of disease transmission and reproductive rate</td><td></td><td></td><td></td></tr> <tr><td>8</td><td>Tutorial public health surveillance and outbreak investigation</td><td></td><td>✓</td><td></td></tr> <tr><td>9</td><td>Epidemiology approach to association and causation</td><td></td><td></td><td></td></tr> <tr><td>10</td><td>Tutorial measuring association</td><td></td><td></td><td></td></tr> <tr><td>11</td><td>Epidemiology study design: introduction, observational and experimental study design I</td><td></td><td></td><td></td></tr> <tr><td>12</td><td>Epidemiology study design: introduction, observational and experimental study design II</td><td></td><td></td><td></td></tr> <tr><td>13</td><td>Epidemiology study design: introduction, observational and experimental study design III</td><td></td><td></td><td></td></tr> <tr><td>14</td><td>Tutorial epidemiological study design: observational study design</td><td></td><td></td><td></td></tr> <tr><td>15</td><td>Bias and confounding</td><td></td><td></td><td></td></tr> <tr><td>16</td><td>Effect measures modification</td><td></td><td></td><td></td></tr> <tr><td>17</td><td>Tutorial bias confounding and modification effect I</td><td></td><td></td><td></td></tr> <tr><td>18</td><td>Tutorial bias confounding and modification effect 2</td><td></td><td></td><td></td></tr> <tr><td>19</td><td>Tutorial effect and impact public health intervention</td><td></td><td></td><td>✓</td></tr> <tr><td>20</td><td>Diagnostic and screening</td><td></td><td></td><td></td></tr> <tr><td>21</td><td>Tutorial public health screening</td><td></td><td></td><td></td></tr> <tr><td>22</td><td>Reading epidemiological paper (critical appraisal)</td><td></td><td></td><td></td></tr> <tr><td>23</td><td>Tutorial appraisal epidemiology paper</td><td></td><td></td><td></td></tr> <tr><td>24</td><td>Ethical and professional issues in epidemiology</td><td></td><td></td><td></td></tr> </tbody> </table>		CPMK	EPI1	EPI2	EPI3	1	Overview and history of Epidemiology	✓			2	Application of epidemiology in public health practice		✓		3	Measuring and comparing disease frequency			✓	4	Tutorial measuring disease frequency I			✓	5	Tutorial measuring disease frequency 2			✓	6	Natural history of disease and level of prevention				7	Dynamic of disease transmission and reproductive rate				8	Tutorial public health surveillance and outbreak investigation		✓		9	Epidemiology approach to association and causation				10	Tutorial measuring association				11	Epidemiology study design: introduction, observational and experimental study design I				12	Epidemiology study design: introduction, observational and experimental study design II				13	Epidemiology study design: introduction, observational and experimental study design III				14	Tutorial epidemiological study design: observational study design				15	Bias and confounding				16	Effect measures modification				17	Tutorial bias confounding and modification effect I				18	Tutorial bias confounding and modification effect 2				19	Tutorial effect and impact public health intervention			✓	20	Diagnostic and screening				21	Tutorial public health screening				22	Reading epidemiological paper (critical appraisal)				23	Tutorial appraisal epidemiology paper				24	Ethical and professional issues in epidemiology				
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Deskripsi Singkat Mata Kuliah	Epidemiology I introduces the basic concepts and principles of epidemiology as applied to public health problems, investigation, appropriate summaries and displays of data, and the use of basic statistical approaches to describe use of rates, ratios and proportions for measuring disease frequency, include methods of direct and indirect adjustment problems. Various epidemiologic study designs for investigating associations between risk factors and disease occurrence in areas of health services, screening, genetics, and environment policy are also introduced. The class will engage in discussion, tutorial and case studies.																																																																																																																															
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	In class activity (25%) Post test (quiz) (20%) Final examination 35%	
Daftar Bahan dan Referensi	The textbook for this course is • Aschengrau & Seage's Essentials of Epidemiology n Public Health, Third Edition, Jones and Bartlett Publishers, • Gordis L, Epidemiology, 3rd Ed. Philadelphia, PA. Elsevier Saunders: 2004. Update edition is preferable	
Nama Dosen Pengampu (<i>Team Teaching</i>)	TEACHING TEAM(S) [if applicable] Hari Kusnanto, Prof, dr, DrPH M. Hakimi, Prof, dr, SpOG(K), PhD dr. M.Bayu Sasongko, Sp.M, M.Epid, PhD Citra Indriani, dr, MPH TEACHING ASSISTANT(S) [if applicable] Risalia Reni A., dr Nur Aini Kusmayanti, S.Gz, MPH M. Ridwan Anshari, S.Gz, M.sc Rosalia Kurniawati H, dr, MPH Agung Nugroho, MPH Abdul Wahab, Drs, MPH Lastdes Cristiany Friday, S.Gz, MPH Anggriyani Wahyu Pinandari, SKM, MPH	
Otorisasi	Tanggal Penyusunan	Koordinator Mata Kuliah
		<i>Tanda Tangan Nama Terang</i>

Rencana Kegiatan Pembelajaran Mingguan (RKPM)

Minggu Ke-	Sub-CPMK (Kemampuan Akhir yang Direncanakan)	Metode Penilaian			Bahan Kajian (Materi Pembelajaran)	Metode Pembelajaran
		Indikator	Komponen	Bobot (%)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Overview and history of Epidemiology					Tatap Muka: Daring:
2	Application of epidemiology in public health practice					
3	Measuring and comparing disease frequency					
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24	Ethical and professionals issues in epidemiology					

Keterangan :

Penilaian pembelajaran (3), (4), (5) dapat berupa:

Metode:

Tatap muka: observasi, tes tertulis, kuis, dsb

Daring: tugas *essay*, *feedback*, penilaian teman sejawat, penyusunan proposal, penyusunan paper, dsb

Instrumen

Tatap muka: soal *essay*, dsb

Daring: pilihan ganda, dsb

Bobot nilai

Bahan kajian (6) dapat berupa:

Sumber belajar yang diberikan oleh pengampu MK, jelaskan substansinya

Sumber belajar yang diperoleh mahasiswa secara online dalam bentuk teks, *slides*, *audio*, *video* dsb, jelaskan substansinya.

Metode pembelajaran (7) dapat berupa:

Metode tatap muka: pemaparan, *collaborative learning*, *problem based learning*, dsb

Metode daring: *self learning*, tugas terstruktur, *essay writing*, dsb

Beban waktu pembelajaran (8):

Tatap muka 2 x 50 menit, atau

Daring 2 x 60 menit belajar mandiri, 2 x 60 menit tugas terstruktur

Pengalaman belajar/aktivitas mahasiswa (9) dapat berupa:

Tatap muka: belajar berkelompok, berdiskusi, berdebat secara konstruktif, pemecahan masalah, dsb

Daring: belajar mandiri, berlatih mengkaji literature, berlatih menulis *essay*, dsb

Media pembelajaran (10) dapat berupa:

Tatap muka: computer, in focus, alat tulis, alat peraga, dsb

Daring: computer, *gadget*, akses internet, dsb