	SEMESTER LEARNING PLAN		Prepared by	Examined by	Approved by	Document Registration Number
Universitas Airlangga	**SLP**		(Person in Charge)	(Head of Bachelor Program / Head of Department)	Vice Dean I	01/S1Kesmas/RPS/2019
	Revision - Date	January 1st, 2019	Mulyono, S.KM., 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	Even Semester	(sign)	(sign)	(sign)	

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A. DETAILS OF COURSE

1.	**Course Name**	Ergonomic and Work Physics I
2.	**Course Code**	KMK214
3.	**Credits (SKS)**	2 (two) SKS
4.	**Semester / Term**	VI (sixth)
5.	**Study Program**	Bachelor of Public Health
6.	**Student Learning Achievement**	1. Able to carry out a study and analysis of the situation 2. Able to develop program policies and planning 3. Able to understand the local culture
7.	**Course Learning Achievement**	1. Define the problem correctly 2. Evaluate data integrity and comparability 3. State the policy choices and formulate them clearly and concisely 4. Decide the appropriate action with the problem at hand 5. Understand the importance of diverse Community Health workers (attitudes)
8.	**Course Description**	This course discusses 1) Basic concepts of ergonomics and problems, 2) Work capacity and workload, 3) Human and machine relations, 4) Workplace design, 5) Work attitude and fatigue, 6) Work productivity, 7) Ergonomic display and VDT, 8) Ergonomic Risk Assessment, 9) Organizing work, 10) Anthropometry and physical fitness, 11) Decoration and music, 12) Psychology of color
9.	**Course Prerequisites (if any)**	None
10.	**Instructor**	Mulyono, S.KM., M.Kes
11.	**Teaching Assistants**	1. Dr. Indriati Paskarini, SH., M.Kes 2. Endang Dwiyanti, Dra., M.Kes 3. Dani Nasirul Haqi, S.KM., M.KKK

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 understand the scope and history of ergonomic development and work performance	General description of ergonomic and work performance. 1. Lecture contract 2. Understanding ergonomic and work performance 3. Ergonomic and work history in the world and in Indonesia	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3
2	Students are able to understand and explain issues related to ergonomics	General description of ergonomic problems. 1. Basic ergonomic concepts 2. Ergonomic problems that exist today and the solution	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3

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1	2	3	4	5	6	7	8	9	10
3	Students are able to understand and explain related work capacity and workload	General description of work capacity and workload. 1. Definition of work capacity and workload 2. The scope of work capacity and workload 3. Factors affecting work capacity and workload 4. Measurement of work capacity and workload	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3
4	Students are able to understand and explain the relationship between humans and machines	General description of human relations with machines. 1. Understanding the relationship	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion	Complex thinking and collaboration	7,14%	1 - 3

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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 / Percentage (%)	Reference Number Ref. (number)
1	2	3	4	5	6	7	8	9	10
		between humans and machines 2. The scope of human relations with machines 3. Problems that occur as a result of human relations with the machine 4. Evaluate human relations with machines				3. Take notes and provide responses			
5	Students are able to understand and explain anthropometry and physical fitness	General description of anthropometry and physical fitness. 1. Definition of anthropometry	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3

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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 / Percentage (%)	Reference Number Ref. (number)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
		and physical fitness 2. The scope of anthropometry and physical fitness 3. How to measure anthropometry and physical fitness 4. Anthropometry standards and physical fitness							
6	Students are able to understand and explain related to work organization	General description of work organization. 1. Understanding the organization of work	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3

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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 / Percentage (%)	Reference Number Ref. (number)
1	2	3	4	5	6	7	8	9	10
		2. How to organize work 3. Problems that occur due to work organization 4. Strengths and weaknesses of the existence of work organization							
7	Students are able to understand and explain work productivity	General description of work productivity. 1. Definition of work productivity 2. The scope of work productivity 3. How to measure work productivity 4. How to increase work productivity	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3

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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 / Percentage (%)	Reference Number Ref. (number)
1	2	3	4	5	6	7	8	9	10
				MID TERM EXAMINATION					
8	Students are able to understand and explain related to ergonomic displays and VDT	General description of ergonomic and VDT displays. 1. Definition of ergonomic and VDT displays 2. The scope of ergonomic and VDT displays 3. Ergonomic and VDT displays in accordance with ergonomic rules 4. Evaluate ergonomic and VDT displays	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3
9	Students are able to understand and explain	General description of ergonomic risk assessment.	Lecture Discussion	Teaching materials LCD	2x50 minutes	1. Asking questions and discussing	Complex thinking and collaboration	7,14%	1 - 3

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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 / Percentage (%)	Reference Number Ref. (number)
1	2	3	4	5	6	7	8	9	10
	related ergonomic risk assessment	1. Understanding ergonomic risk assessment 2. Types of measurements for ergonomic risk assessment	Simulation	Handout		2. Pay attention and discussion 3. Take notes and provide responses			
10	Students are able to understand and explain related workplace design and MMH	General description of workplace design and MMH. 1. Understanding workplace design and MMH 2. The scope of the workplace design and MMH 3. How to evaluate workplace design and MMH	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3

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1	2	3	4	5	6	7	8	9	10
		4. Determination of workplace design and MMH in accordance with ergonomic rules							
11	Students are able to understand and explain work attitudes and fatigue	General description of work attitude and fatigue. 1. Understanding work attitudes and fatigue 2. The scope of work attitude and fatigue 3. How to measure work attitude and fatigue 4. Evaluate work attitude and correct fatigue	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3

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1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
12	Students are able to understand and explain related to decoration and music	General description of decoration and music. 1. Understanding decoration and music 2. Reasons for choosing decorations and music 3. Weaknesses and strengths of decoration and music 4. Evaluate the decoration and music used in the industry	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3

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1	2	3	4	5	6	7	8	9	10
13.	Students are able to understand and explain color psychology	General description of color psychology. 1. Definition of color psychology 2. Reasons for choosing color psychology 3. Weaknesses and strengths of each color 4. Evaluate the colors used in the industry	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3
14.	Students are able to understand and explain things related to ergonomics and work-related issues	General description of case studies. 1. Case studies related to workload 2. Case studies related to human	Lecture Discussion Simulation	Teaching materials LCD Handout	2x50 minutes	1. Asking questions and discussing 2. Pay attention and discussion 3. Take notes and provide responses	Complex thinking and collaboration	7,14%	1 - 3

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1	2	3	4	5	6	7	8	9	10
		and machine relations 3. Case studies related to anthropometry and physical fitness 4. Case studies related to work productivity 5. Case studies related to workplace design 6. Case studies related to ergonomic risk assessment							
FINAL TERM EXAMINATION									

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C. REQUIRED TEXTS / REFERENCES / ESSENTIAL READINGS

1. Ergonomics At Work, david Orbone, 1991
2. Teknik Tata Cara Kerja, Iftikar Z Sutatakalasmana
3. Ergonomic Design for People at Work, By the Human Factors Section, Eastaran Kodak Company