



SEMESTER LEARNING PLAN SEMESTER I

COURSE : ECONOMIC MATHEMATICS



ISLAMIC ECONOMIC STUDY PROGRAM FACULTY OF ECONOMIC AND BUSSINESS MUHAMMADIYAH UNIVERSITY OF MAKASSAR

	MAKASSAR N UNI	AUHAMMADIYAH VERSITY	Code : Date :	LP-UNISMUH-02.2			
		RPS form	Revision : Page	0			
Used For complete	lard						
Drogoss		Person responsible					
Frocess	Name	Position	Signature	Date			
1. Formulation							
2. Inspection							
3. Consent							
4. Determination							
5. Control							

SEMESTER LEARNING PLAN (BLENDED LEARNING MODEL – FLIPPED LEARNING TYPE)

SUBJECT : MATHEMATICS ECONOMICS I

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MAKASSAR MUHAMMADIYAH UNIVERSITY FACULTY OF ECONOMICS AND BUSINESS ISLAMIC ECONOMIC STUDIES PROGRAM

SEMESTER LEARNING PLAN								
COURSE NAME		MK CODE	MK RUMPU		WEIGHT (CREDITS)		SEMESTER	DATE OF COMPILATION
Mather	natics 1	BW6023110			T=3	P =	Ι	2021-2022
GKM FEB	UNISMUH	NAME OF R	PS PREPAITOR	RMK COO	ORDINA	ATOR		KA PRODI
Asri Jaya, SE., MM		Dr. Asria	iati , SE, M.Sc Dr. A		. Asriati , SE, M.Sc		Dr. H. Muhammad Najib Kasim, SE, M.Sc	
GRADUATE LEARNING OUTCOMES CHARGED AT MK (CPL)								
	CPL 1 (S)	Have integrity in the order of academic values, norms and ethics						
	CPL2 (P)	Mastering basic concepts, definitions and economic theories in an integrated manner both orally and in writing						er both orally and in writing
LFARNING	CPL3 (KU)	Mastering models and analysis economy in describe phenomenon development economics contemporary, as well capable apply methods quantitative applied in it						
OUTCOMES	CPL4 (KK)	Able to apply principles _ base economy For analyze issues and policies development economy contemporar fine regional, national level						oment economy contemporary,
Sub CPMK) COURSE LEARNING CAPAIN (CPMK)								
	CPMK1	Explaining the	Form and Concept of	Series and T	heir App	lication	in Economics	
	CPMK2	Explain Form a	nd Concept Linear F	unctions and A	Applicat	ion in the	e Economic Field	d
	СРМК3	Explain Form a	nd Concept Function	Non-Linear a	and its A	pplicatio	on in Economics	
CPMK4 Explain Form and Concept Function Differentials and their Application in E							ation in Econom	ics



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SEMESTER LEARNING PLAN

	FINAL CAPABILI	FINAL CAPABILITY OF EACH LEARNING STAGE (Sub-CPMK)								
	Sub-CPMK1	Students can under	Students can understand and master economic mathematical concepts and their applications							
	Sub-CPMK2	Explain _ Form an	Explain _ Form and Concept Row Arithmetic and Series Measuring							
	Sub-CPMK3	Explain About Sin	Explain About Simple Interest, Business Development Models, Compound Interest, and Growth Models Resident							
	Sub-CPMK4	Explain about Slo Finding Roots Lin	Explain about Slope Point Cut Axis, Formation Linear Equations, Relationship between Two Straight Lines, Finding Roots Linear Equations							
	Sub-CPMK5	Explain and calcu Analysis	Explain and calculate the Demand Function, Supply Function, Market Equilibrium Function, and Break-Off Analysis							
	Sub-CPMK6	Explain about Qua	Explain about Quadratic Functions and Triple Power Functions							
	Sub-CPMK7	Explain about Function Request, Function Offers, Functions Balance Market, Function Production								
	Sub-CPMK8	Explain about Understanding Limits, Limit Propositions, Continuity								
	Sub-CPMK9	Explain _ about de	erivative concept _ o	derivative First, the	e arguments Differe	ntiation				
	CORRELATION	Sub-CPMK1	Sub-CPMK2	Sub-CPMK3	Sub-CPMK4	Sub-CPMK5	Sub-CPMK6			
	CPMK1	\checkmark								
	CPMK2		\checkmark							
	СРМК3	✓								
	CPMK4				\checkmark					
COURSE DESCRIPTION	Economic Mathem mathematical sym functions, differen	natics is a course the bols. In this course tial and integral fun	nat discusses or so , students will solv ctions.	lves economic prole	blems using mathe ems using the conc	matical concepts/po epts of series, linea	ostulates through ar and non-linear			

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	SEMESTER LEARNING PLAN							
STUDY MATERIALS (TOPICS)	 Draft Economic math Row Arithmetic and Series Measuring Application Row Arithmetic and Series Measure in Economics _ Linear Functions Application Linear Functions in Economics Analysis Opportunity Tree Function Non-Linear Application Function Non - Linear in Economics Function Differential Simple Application Function Differential in Economics _ Limit Concept Integral Concept Application of Integrals in Economics _ 							
REFERENCE	 References : Assauri , Sofjan . Economic math . Jakarta : Rajawali Press. 2009. Chiang, C . Alpha.Fundamental Methods of Mathematical Economics. 3rd ed. New York: Mc Graw-Hill, 1984. D. Cashmere. Introduction to Financial Management . Daus , Paul h. & william m. introduction to mathematical analysis with application to problems of economics . Reading massachusetts.usa : addison welsey publishing company inc. p.64 Paul p. Daus & William M. introduction to mathematical analysis with application to problems of economics . Reading massachusetts.usa : addison welsey publishing company inc. p.64 Paul p. Daus & William M. introduction to mathematical analysis with application to problems of economics . Reading massachusetts.usa : addison welsey publishing company inc. Dumairy . Mathematics Applied For Business and Economics . Edition Second . Yogyakarta: BPFE.2012. Handoko, T. Hani. Basics of Management and Operations . 7th Edition. Yogjakarta : BPFE. 1999. Josep Bintang Kalangi. Economics and Business Mathematics, 4th edition Book 1. Jakarta: Salemba Four , 2018. Schroeder, Roger. Decision Making in an Operation . 3rd Edition. Jakarta : Erlangga.2001. Weber JE (1982). Mathematical analysis : business and economic applications (4th ed.). Harper & Row. Zahri, Syahriman Yusi Imron. Economic Mathematics (Theory and Applications) . Jakarta: Mitra Discourse Media. 2017. 							

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SEMESTER LEARNING PLAN					
	Reference Addition				
	1. Internet				
	2. Journal of Education				
LECTURER NAME	Dr. Asriati , SE, M.Si				
REQUIRED COURSES	-				

1. 1ST MEETING

	LESSON PLAN: 1 ST MEETING							
ASPECT		ONI	LINE			OFFLINE		
SUB-CPMK	Student capable	e analyze draft n	nathematics econ	nomy				
	After learning t	After learning the concepts mathematics economy students can:						
	1. Understanding about variables, constant, coefficient, And parameter							
	2. Understar	nd about equality	y And inequality	,				
INDICATOR	3. Understar	nd about draft A	nd theory set					
	4. Understat	nd about system	number real					
	Understand abo	derstand about rule rank rooting And factoring						
STUDY MATERIALS	- Text - PPT Slides Related videos mathematics economy							
	SPADA URL							
INSTRUCTIONAL MEDIA	LMS Features	Page√URLsDockVideos	Lessons Forum Task Survey	Slides Quiz Meetings Other	V	Learning class : Laptops, LCD Projectors, and Tools		
	Other Media		<u> </u>					
		Scenarios	& Features			Scenario		
LEARNING MODEL								
LEARNING TIME BURDEN	 Independent Study : 3 x 50 minutes Task Structured : 3 x 50 minutes 					• Face to face : 3 x 50 minut	es	
LEARNING EXPERIENCE	Activity IndependentDiscussion							
	LMS Features Instruments				Туре	Instruments		

LESSON PLAN: 1 ST MEETING						
ASPECT	ONLINE		OFFLINE			
LEARNING ASSESSMENT	Assignment	<i>Literature Review</i> Forum = <i>Feedback</i>	Presentation (<i>Group Work</i>) Group discussion	Holistic Assessment Rubric		
	Weight : 3.5%					

2. 2ND MEETING

	LESSON PLAN: 2 ND MEETING									
ASPECT		ONI	LINE				OFF	LINE		
	Students can e	xplain the defin	ition of seri	ies, 1	the concept o	f ai	rithmetic series, the concept of	geometric series, and complete		
SUB-CPMK	calculations related to the concept of arithmetic series and the concept of geometric series.									
	1. Understand	1. Understand and explain the definition of a series								
	2. Understand	and explain the	concept of a	arith	metic series					
INDICATOR	3. Understand	and explain the	concept of g	geon	netric series					
	4. Solve proble	ems related to th	e concept of	f arit	hmetic series	and	d the concept of geometric series			
	- Text									
STUDY MATERIALS	- PPT Slides Related videos mathematics economy									
	SPADA URL -									
		Page √	Lessons		Slides					
INSTRUCTIONAL	LMS Features	URLs $$	Forum		Quiz		Learning in class : Laptops, LCD Projectors, and Station			
MEDIA		Videos	1 ask Survey	N	Other					
	Other Media	Videos, Zoom	, Google Me	eet, a	and YouTube					
		Scenarios	& Features				Scenario			
LEARNING MODEL										
LEARNING TIME	Independe	nt Study : 3 x 5	0 minutes				• Face to face : 3 x 50 minutes			
BURDEN LEARNING	Task Structured : 3 x 50 minutes Activity Independent									
EXPERIENCE	- Discussion									
LEARNING	LMS F	eatures	Ir	nstru	iments		Туре	Instruments		
ASSESSMENT	Assignment		Literature	Rev	iew		Presentation (Group Work)	Holistic Assessment Rubric		
	Forum = <i>Feedback</i>				back	Group discussion				

LESSON PLAN: 2 ND MEETING						
ASPECT	ONLINE	OFFLINE				
	Weight : 3.5%					

3. 3RD **MEETING**

	LESSON PLAN: 3 RD MEETING							
ASPECT		ONI	LINE		OFI	TLINE		
SUB-CPMK	Students can exclude the students can exclude the students can be added as a student s	xplain the defin ated to the conc	ition of series, ept of arithmetic	the concept of a series and the c	rithmetic series, the concept of oncept of geometric series.	geometric series, and complete		
	1. Understand	and explain the	definition of a s	eries				
	2. Understand	and explain the	concept of arith	metic series				
INDICATOR	3. Understand	and explain the	concept of geon	netric series				
	4. Solve proble	ems related to th	e concept of ari	thmetic series an	d the concept of geometric serie	S.		
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	- Text							
STUDY MATERIALS	- PPT Slides Paloted videos methometics economy							
	SPADA URL	SPADA URL -						
		Page √	Lessons	Slides $$				
INSTRUCTIONAL	LMS Features	URLs √	Forum √	Quiz $$	Learning in class : Laptops, LCD Projectors, and Stationery			
MEDIA		Dock √ Videos	Task $$	Other				
	Other Media	Videos, Zoom	. Google Meet. a	and YouTube	-			
		Scenarios	& Features		Scenario			
LEARNING MODEL								
LEARNING TIME	Independe	nt Study : 3 x 5	50 minutes		Eago to face : 3 x 50 minutos			
BURDEN	Task Structured : 3 x 50 minutes							
LEARNING EXPERIENCE	<ul> <li>Activity In</li> <li>Discussion</li> </ul>	dependent						
	LMS F	eatures	Instru	uments	Туре	Instruments		
ASSESSMENT	Assignment		<i>Literature Rev</i> Forum = <i>Feed</i>	riew back	Presentation ( <i>Group Work</i> ) Group discussion	Holistic Assessment Rubric		

LESSON PLAN: 3 RD MEETING						
ASPECT	ONLINE	OFFLINE				
	<b>Weight</b> : 3.5%					

## 4. 4TH MEETING

		NG							
ASPECT		ONI	LINE			OFF	LINE		
SUB-CPMK	Students can explain simple interest, business development models, compound interest and population growth models. Students are also expected to be able to calculate simple interest, business development models, compound interest, and population growth models.								
	1. Explain and	calculate the co	oncept of simpl	e interest					
NDICLEOD	2. Explain and calculate business development models								
INDICATOR	3. Explain and	calculate the co	oncept of comp	ound interest					
	4. Explain and	calculate popul	ation growth n	nodels					
	- Text								
SIUDY MATERIALS	- PPT Slides Related videos	mathematics eco	onomy						
	SPADA URL	-	2						
		Page √	Lessons	Slides					
INSTRUCTIONAL	LMS Features	URLs $$	Forum 1	Quiz		Learning in class : Laptops, LCD Projectors, and Station			
		Videos	Survey	Other	_				
	Other Media	Videos, Zoom	, Google Meet	, and YouTube					
		Scenarios	& Features			Sce	nario		
LEARNING MODEL									
LEARNING TIME	Independe	nt Study : 3 x 5	0 minutes			• Face to face : 3 x 50 minu	tes		
BURDEN LEARNING	<ul> <li>Task Struc</li> <li>Activity In</li> </ul>	ctured : <u>3 x 50 r</u> dependent	ninutes						
EXPERIENCE	- Discussion	acpendent							
LEARNING	LMS F	eatures	Inst	ruments		Туре	Instruments		
ASSESSMENT	Assignment		Literature Re	eview		Presentation ( Group Work )	Holistic Assessment Rubric		
	Forum = Feedback					Group discussion			

	LESSON PLAN: 4 TH MEETING								
ASPECT	ONLINE	OFFLINE							
	<b>Weight</b> : 3.5%								

## 5. 5TH MEETING

			LESSON	PLA	N: MEETIN	<b>IG</b> :	5 TH		
ASPECT		ONI	LINE				OFF	LINE	
	Students can explain the meaning of linear functions, presentation of functions and graphs, formation of linear equations and the								
SUB-CPMK	relationship bet	ween two straig	ht lines.						
	1. Understand	and explain the	meaning of	line	ar functions				
	2. Understand and explain the presentation of functions and graphs								
INDICATOR	3. Understand	and explain the	formation o	f lin	ear equations				
	4. Understand	and explain the	relationship	bety	ween two stra	ight	t lines		
	- Text								
STUDY MATERIALS	- PPT Slides Related videos	mathematics eco	onomy						
	SPADA URL	-	y						
		Page √	Lessons		Slides		Learning in class : Laptops, LCD Projectors, and Stationery		
INSTRUCTIONAL	LMS Features	URLs $$	Forum		Quiz				
		Videos	Survey	N	Other				
	Other Media	Videos, Zoom	, Google Me	eet, a	nd YouTube				
I FADNING MODEL		Scenarios	& Features				Sce	nario	
LEARNING MODEL									
LEARNING TIME	Independe     Teals Stress	<b>nt Study</b> : 3 x 5	0 minutes				• Face to face : 3 x 50 minut	tes	
LEARNING	- Activity In	dependent	minutes						
EXPERIENCE	- Discussion	•						1	
LEARNING	LMS F	eatures	Ir	istru	iments		Туре	Instruments	
ASSESSMENT	Assignment		Literature	Rev	iew back		Presentation ( <i>Group Work</i> ) Group discussion	Holistic Assessment Rubric	
			1010101 - 1	eeu	JUCK		Oroup discussion		

	LESSON PLAN: MEETING 5 TH								
ASPECT	ONLINE	OFFLINE							
	<b>Weight</b> : 3.5%								

## 6. 6TH MEETING

			LESSON PLA	N: 6 TH MEET	ING					
ASPECT		ONI	LINE			OFFLINE				
SUB-CPMK	Students can explain the meaning of the demand function, supply function, market balance, the effect of taxes and subsidies on market balance and complete calculations related to the application of linear functions in economics									
	1. Understan	d and explain at	oout understandi	ng function req	uest					
	2. Understand and explain about understanding function offer									
INDICATOR	3. Understand and explain about understanding market balance									
	4. Understand and explain about application inner linear function knowledge economy									
	5. Finish rela	ated problems _	with application	inner linear fur	action Economics					
STUDY MATERIALS	- Text - PPT Slides Related videos	Text PPT Slides Related videos mathematics economy								
	SPADA URL	-								
INSTRUCTIONAL MEDIA	LMS Features	Page $$ URLs $$ Dock $$ Videos	LessonsForum $\sqrt$ Task $\sqrt$ Survey	SlidesNQuizNMeetingsOther	$\frac{\sqrt{1}}{\sqrt{1}}$ Learning in class : Laptops, LCD Projectors, and Stationery					
	Other Media	Videos, Zoom	, Google Meet, a	and YouTube	_					
		Scenarios	& Features			Scenario				
LEARNING MODEL										
LEARNING TIME BURDEN	<ul><li>Independe</li><li>Task Struct</li></ul>	<b>nt Study</b> : 3 x 5 <b>ctured</b> : 3 x 50 r	0 minutes ninutes		• Face to face : 3 x 50	minutes				
LEARNING EXPERIENCE	<ul><li>Activity In</li><li>Discussion</li></ul>	dependent								
LEARNING	LMS F	eatures	Instru	uments	Туре	Instruments				
ASSESSMENT	Assignment		Literature Rev	iew	Presentation ( Group Wo	<i>k</i> ) Holistic Assessment Rubric				

LESSON PLAN: 6 TH MEETING								
ASPECT	ONI	JNE	OFFLINE					
		Forum = <i>Feedback</i>	Group discussion					
	<b>Weight</b> : 3.5%							

## 7. 7TH MEETING

			LESSON PLA	AN: 7 TH MEETI	NG					
ASPECT		ONI	LINE		OFFLINE					
SUB-CPMK	Students can explain the meaning of cost function, revenue function, profit/profit, break-even (BEP) and solve problems related to break-even analysis									
	1. Understan	d and explain at	bout understand	ing function cost						
	2. Understand and explain about understanding function reception									
INDICATOR	3. Understand and explain about understanding profit / profit									
	4. Understan	d and explain at	bout analysis go	home principal						
	5. Finish related problems _ with Analysis go home principal									
STUDY MATERIALS	- Text - PPT Slides Related videos	- Text - PPT Slides Related videos mathematics economy								
	SPADA URL -									
INSTRUCTIONAL MEDIA	LMS Features	Page $$ URLs $$ Dock $$	LessonsForum $$ Task $$	$\frac{\text{Slides}}{\text{Quiz}} \sqrt{\frac{1}{\sqrt{2}}}$	Learning in class : Laptops, LC	CD Projectors, and Stationery				
		Videos	Survey	Other						
	Other Media	Videos, Zoom	, Google Meet,	and YouTube						
LEADNING MODEL		Scenarios	& Features		Scer	nario				
LEARNING MODEL										
LEARNING TIME BURDEN	<ul><li>Independe</li><li>Task Struct</li></ul>	<b>nt Study</b> : 3 x 5 <b>ctured</b> : 3 x 50 r	50 minutes ninutes		• Face to face : 3 x 50 minut	tes				
LEARNING EXPERIENCE	<ul><li>Activity In</li><li>Discussion</li></ul>	dependent								
LEARNING	LMS F	eatures	Instr	uments	Туре	Instruments				
ASSESSMENT	Assignment		Literature Rev	iew	Presentation ( Group Work )	Holistic Assessment Rubric				

LESSON PLAN: 7 TH MEETING									
ASPECT	ONI	LINE	OFFLINE						
		Forum = <i>Feedback</i>	Group discussion						
	Weight : 3.5%								

## 8. 8TH MEETING

	LESSON PLAN: 8 TH MEETING										
ASPECT			ONI	LINE				OFF	LINE		
SUB-CPMK	The Mid-Sem presented. UT Achievements from correctne	The Mid-Semester Examination (UTS) is carried out to measure students' level of understanding of the material that has been presented. UTS is carried out to assess the success of students' studies specifically on the programmed course material. Achievements regarding the success of the lecture material during the previous 7 meetings were seen from achievements starting from correctness and accuracy in answering questions, timeliness of work, etc.									
INDICATOR	<ol> <li>Measuring</li> <li>Measuring</li> <li>Measures u</li> <li>Measures u</li> <li>Measures u</li> <li>Measuring</li> </ol>	<ul> <li>Measuring students' understanding of the concept of sequences and series</li> <li>Measuring students' abilities and accuracy in determining arithmetic series and geometric series</li> <li>Measures understanding and accuracy in creating linear functions</li> <li>Measures understanding and accuracy in creating linear graphs</li> <li>Measuring understanding and accuracy in analyzing breakeven</li> </ul>									
STUDY MATERIALS	- Text - PPT Slides Related videos	mathematic	cs ec	onomy							
	SPADA URL	-				1					
INSTRUCTIONAL MEDIA	LMS Features	Page URLs Dock Videos	 	Lessons Forum Task Survey	$\sqrt{1}$	Slides Quiz Meetings Other		Learning in class : Laptops, LC	D Projectors, and Stationery		
	Other Media	Videos, Z	loom	, Google M	eet, a	and YouTube					
I FARNING MODEL		Scena	rios	& Features	5			Scer	ario		
LEARNING TIME BURDEN	<ul><li>Independe</li><li>Task Struct</li></ul>	nt Study : ctured : 3 x	3 x 5 50 i	50 minutes minutes				• Face to face : 3 x 50 minut	es		
LEARNING EXPERIENCE	<ul><li>Activity In</li><li>Discussion</li></ul>	dependent	;								
	LMS F	eatures		I	nstru	iments		Туре	Instruments		

LESSON PLAN: 8 TH MEETING								
ASPECT		ONLINE	OFFLINE					
LEARNING	Assignment	<i>Literature Review</i> Forum = <i>Feedback</i>	Presentation ( <i>Group Work</i> ) Group discussion	Holistic Assessment Rubric				
ASSESSMENT	<b>Weight</b> : 30%							

#### 9. MEETING 9

		÷9								
ASPECT		ONI	LINE				OFF	LINE		
	The achievement in learning this topic is that students are expected to be able to explain quadratic functions, cube functions and									
SUB-CPMK	rational functio	ns.								
	1. Understand and explain the meaning of quadratic functions									
INDICATOR	2. Understand and explain the cube function									
	3. Understand and explain rationality									
	- Text									
STUDY MATERIALS	- PPT Slides Related videos	- PPT Slides Related videos mathematics economy								
	SPADA URL	-	J							
	LMS Features	Page √	Lessons		Slides		- Learning in class : Laptops, LCD Projectors, and Stationery			
INSTRUCTIONAL		URLs $$	Forum		Quiz					
MEDIA		Dock V Videos	Task	N	Other					
	Other Media	Videos, Zoom	, Google M	eet, a	and YouTube					
		Scenarios	& Features	5			Scenario			
LEAKNING MODEL										
LEARNING TIME	<ul> <li>Independe</li> <li>Togle Struct</li> </ul>	<b>nt Study</b> : 3 x 5	0 minutes				• Face to face : 3 x 50 minut	tes		
LEARNING	- Task Struc	dependent	mnutes							
EXPERIENCE	- Discussion	1	<u>.</u>							
	LMS F	eatures	I	nstru	iments		Туре	Instruments		
LEARNING ASSESSMENT	Assignment		<i>Literature</i> Forum = <i>I</i>	e Rev Feed	iew back		Presentation ( <i>Group Work</i> ) Group discussion	Holistic Assessment Rubric		
	<b>Weight</b> : 3.5%						·			

## 10. $10^{\text{TH}}$ MEETING

	LESSON PLAN: 10 TH MEETING										
ASPECT		ONI	LINE			OFFLINE					
SUB-CPMK	Students can explain the application function non-linear form function square in economics, that is in function demand, supply and market balance.										
INDICATOR	After studying balance non lin	After studying the material at this meeting, students able to describe the functions of demand, supply and market balance non linear.									
STUDY MATERIALS	- Text - PPT Slides Related videos	- Text - PPT Slides Related videos mathematics economy									
	SPADA URL	-				Learning in class : Laptops, LCD Projectors, and Stationery					
INSTRUCTIONAL MEDIA	LMS Features Other Media	Page $$ URLs $$ Dock $$ Videos $$ Videos, Zoom	LessonsForum $$ Task $$ Survey $$ , Google Meet,	Slides Quiz Meetings Other and YouTube							
LEADNING MODEL		Scenarios	& Features			Scenario					
LEAKNING MODEL											
LEARNING TIME BURDEN	<ul><li>Independe</li><li>Task Struct</li></ul>	<b>nt Study</b> : 3 x 5 <b>ctured</b> : 3 x 50 r	0 minutes ninutes			• Face to face : 3 x 50 minu	tes				
LEARNING EXPERIENCE	<ul><li>Activity In</li><li>Discussion</li></ul>	dependent									
	LMS F	eatures	Instr	uments		Туре	Instruments				
LEARNING ASSESSMENT	Assignment		<i>Literature Rev</i> Forum = <i>Feed</i>	view Iback		Presentation ( <i>Group Work</i> ) Group discussion	Holistic Assessment Rubric				
	<b>Weight</b> : 3.5%										

## $11. \quad 11^{\text{TH}} \text{ MEETING}$

			LESSON	PLA	N: 11 TH ME	ETI	ING			
ASPECT		O	ILINE				OFF	LINE		
SUB-CPMK	Student capable	e analyze differ	ential function	simpl	e		1			
	Understand diff	ferential function	n simple is m	etho	d or pattern	thir	nk knowledge economics and b	pusiness with nature analysis _		
INDICATOR	quantitative . I	Differential funct	ion simple as	bran	ch which dis	cus	s about quotations and derivati	ves, rules rule differentiation,		
	derivative with more levels _ tall .									
STUDY MATERIALS	- Text - PPT Slides Related videos	- Text - PPT Slides Related videos mathematics economy								
	SPADA URL	-								
INSTRUCTIONAL MEDIA	LMS Features	Page $$ URLs $$ Dock $$ Videos	Lessons Forum Task Survey		Slides Quiz Meetings Other		$\frac{\sqrt{\sqrt{1+1}}}{\sqrt{1+1}}$ Learning in class : Laptops, LCD Projectors, and Station			
	Other Media	er Media Videos, Zoom, Google Meet, and YouTube								
I FADNING MODEL		Scenario	s & Features	5			Scenario			
LEARNING TIME BURDEN	<ul><li>Independe</li><li>Task Struct</li></ul>	nt Study : 3 x ctured : 3 x 50	50 minutes				• Face to face : 3 x 50 minu	tes		
LEARNING EXPERIENCE	<ul><li>Activity In</li><li>Discussion</li></ul>	dependent								
	LMS F	eatures	I	nstru	iments		Туре	Instruments		
LEARNING ASSESSMENT	Assignment		$\begin{array}{l} Literature \\ Forum = 1 \end{array}$	e Rev Feed	iew back		Presentation ( <i>Group Work</i> ) Group discussion	Holistic Assessment Rubric		
	<b>Weight</b> : 3.5%									

## 12. $12^{\text{TH}}$ MEETING

			LESSON I	PLA	N: 12 TH ME	ETI	NG		
ASPECT		ONI	LINE				OFF	LINE	
	1. Stude	nt capable anal	lyze elasticit	у					
SUB-CPMK	2. Stude	nt capable analy	ze cost						
	3. Student capable analyze cost marginal								
1. Accuracy analyze elasticity .									
INDICATOR	2. Accuracy analyze cost .								
	3. Accuracy analyze cost marginal								
STUDY MATERIALS	- Text - PPT Slides Related videos mathematics economy								
	SPADA URL -								
		Page √	Lessons	1	Slides				
INSTRUCTIONAL MEDIA	LMS Features	$\nabla RLs = \sqrt{\nabla RLs}$	Forum	$\frac{}{}$	Quiz Meetings	γ	Learning in class : Laptops, LCD Projectors, and Static		
		Videos	Survey	Y	Other		-		
	Other Media	Videos, Zoom	, Google Me	eet, a	and YouTube				
LEARNING MODEL		Scenarios	& Features				Scer	nario	
LEARNING TIME BURDEN	<ul> <li>Independe</li> <li>Task Struct</li> </ul>	nt Study : 3 x 5 ctured : 3 x 50 1	0 minutes ninutes				• Face to face : 3 x 50 minut	es	
LEARNING EXPERIENCE	<ul><li>Activity In</li><li>Discussion</li></ul>	dependent							
LEARNING	LMS F	eatures	In	stru	iments		Туре	Instruments	
ASSESSMENT	Assignment		Literature	Rev	iew		Presentation ( Group Work )	Holistic Assessment Rubric	

LESSON PLAN: 12 TH MEETING								
ASPECT	ONI	LINE	OFFLINE					
		Forum = <i>Feedback</i>	Group discussion					
	Weight : 3.5%							

## $13. \quad 13^{\text{TH}} \text{ MEETING}$

			LESSON	PLA	N: 13 TH ME	ETI	ING			
ASPECT		ONI	LINE				OFF	LINE		
	1. Capat	ole capable ana	lyze integra	l or i	not Of course		·			
SUB-CPMK	2. Capable capable analyze integral of course									
INDICATOR	1. Accur 2. Accur	racy analyze int racy analyze inte	egral or not	Of c	course					
STUDY MATERIALS	- Text - PPT Slides Related videos mathematics economy									
INSTRUCTIONAL MEDIA	SPADA URL	-								
	LMS Features	Page $$ URLs $$ Dock $$ Videos	Lessons Forum Task Survey	$\sqrt{1}$	Slides Quiz Meetings Other		Learning in class : Laptops, LO	CD Projectors, and Stationery		
	Other Media	Videos, Zoom	, Google M	eet, a	and YouTube					
LEARNING MODEL		Scenarios	& Features	5			Scenario			
LEARNING TIME	<ul> <li>Independe</li> <li>Tosk Struct</li> </ul>	<b>nt Study</b> : $3 \times 5$	0 minutes				• Face to face : 3 x 50 minutes			
LEARNING	- Activity In	dependent	minutes							
EXPERIENCE	- Discussion									
	LMS F	eatures	Iı	nstru	iments		Туре	Instruments		
LEARNING ASSESSMENT	Assignment		$\begin{array}{l} Literature \\ Forum = I \end{array}$	Rev Feed	iew back		Presentation ( <i>Group Work</i> ) Group discussion	Holistic Assessment Rubric		
	<b>Weight</b> : 3.5%									

# **14. 14**TH **MEETING**

			LESSON	PLA	N: 14 TH ME	ETI	ING			
ASPECT		ONI	INE				OFF	LINE		
	1. Capat	ole capable ana	lyze integra	l or i	not Of course					
SUB-CPMK	2. Capable capable analyze integral of course									
INDICATOR	1. Accur 2. Accur	racy analyze int racy analyze inte	egral or not egral of cour	Of c	course					
STUDY MATERIALS	- Text - PPT Slides Related videos	- Text - PPT Slides Related videos mathematics economy								
INSTRUCTIONAL MEDIA	SPADA URL	-		-						
	LMS Features	Page $$ URLs $$ Dock $$ Videos	Lessons Forum Task Survey	$\sqrt{1}$	Slides Quiz Meetings Other		$\frac{\sqrt{1}}{\sqrt{1}}$ Learning in class : Laptops, LCD Projectors, and Stati			
	Other Media	her Media Videos, Zoom, Google Meet, and YouTube								
I FADNING MODEI		Scenarios	& Features				Scenario			
LEARNING WODEL										
LEARNING TIME	Independe	<b>nt Study</b> : 3 x 5	0 minutes				• Face to face : 3 x 50 minu	tes		
LEARNING	<ul> <li>Task Struc</li> <li>Activity In</li> </ul>	cturea : 3 x 50 r dependent	ninutes							
EXPERIENCE	- Discussion	acpendent								
	LMS F	eatures	I	nstru	iments		Туре	Instruments		
LEARNING ASSESSMENT	Assignment		<i>Literature</i> Forum = <i>I</i>	Rev. Feed	iew back		Presentation ( <i>Group Work</i> ) Group discussion	Holistic Assessment Rubric		
	Weight : 3.5%									

# 15. 15TH MEETING

	LESSON PLAN: 15 TH MEETING										
ASPECT		ONI	LINE				OFF	LINE			
	1. Student	capable apply I	ntegral econo	omics	s no Of cou	se.					
SUB-CPMIK	2. Student capable apply integral economics of course .										
INDICATOR	1.Accurac2.Accurac	<ol> <li>Accuracy apply Integral economics no Of course .</li> <li>Accuracy apply integral economics of course .</li> </ol>									
STUDY MATERIALS	- Text - PPT Slides Related videos	- Text - PPT Slides Related videos mathematics economy									
INSTRUCTIONAL MEDIA	SPADA URL	-									
	LMS Features	Page $$ URLs $$ Dock $$ Videos	Lessons Forum Task Survey	$\frac{1}{\sqrt{2}}$	Slides Quiz Meetings Other		$\frac{\sqrt{1}}{\sqrt{1}}$ Learning in class : Laptops, LCD Projectors, and Statio				
	Other Media	Videos, Zoom	, Google Mee	et, an	nd YouTube						
I FARNING MODEI		Scenarios	& Features				Scenario				
LEARNING TIME BURDEN	<ul> <li>Independe</li> <li>Task Struct</li> </ul>	<b>nt Study</b> : 3 x 5 <b>:tured</b> : 3 x 50 r	0 minutes ninutes				• Face to face : 3 x 50 minutes				
LEARNING EXPERIENCE	<ul> <li>Activity In</li> <li>Discussion</li> </ul>	dependent						_			
	LMS F	eatures	Ins	strun	nents		Туре	Instruments			
LEARNING ASSESSMENT	Assignment		Literature R Forum = Fe	Revie redbo	?w ack		Presentation ( <i>Group Work</i> ) Group discussion	Holistic Assessment Rubric			
	<b>Weight</b> : 3.5%										

# 16. 16TH MEETING

			LESSON I	PLA	N: 16 th MEI	ETI	ING		
ASPECT		ONI	LINE				OFF	LINE	
SUB-CPMK	Semester Final								
INDICATOR	- Able to comp	- Able to complete the question given related topic meeting 9-15							
STUDY MATERIALS	- Text - PPT Slides Related videos	mathematics eco	onomy						
	SPADA URL	-							
INSTRUCTIONAL MEDIA	LMS Features Other Media	Page $$ URLs $$ Dock $$ Videos $$ Videos, Zoom	Lessons Forum Task Survey , Google Me	$\sqrt[]{}$	Slides Quiz Meetings Other and YouTube	$\sqrt{1}$	Learning in class : Laptops, LO	CD Projectors, and Stationery	
	Scenarios & Features						Scenario		
LEARNING MODEL									
LEARNING TIME BURDEN	<ul><li>Independer</li><li>Task Struct</li></ul>	<b>nt Study</b> : 3 x 5 <b>ctured</b> : 3 x 50 r	0 minutes ninutes				• Face to face : 3 x 50 minu	tes	
LEARNING EXPERIENCE	<ul><li>Activity In</li><li>Discussion</li></ul>	dependent							
	LMS F	eatures	Ir	nstru	iments		Туре	Instruments	
LEARNING ASSESSMENT	Assignment	Assignment			iew back		Presentation ( <i>Group Work</i> ) Group discussion	Holistic Assessment Rubric	
	<b>Weight</b> : 30%								

# **RENCANA TUGAS PROYEK**



#### MAKASSAR MUHAMMADIYAH UNIVERSITY ECONOMICS AND BUSINESS ISLAMIC ECONOMICS

STUDENT ASSIGNMENT PLAN										
COURSE IDENTITY	MK's name	Code	Semester	SKS						
COURSE IDENTITI	ECONOMIC MATH	CC 70307	Ι	3						
	Form of A	ssignment	Task Comp	letion Time						
TASK DESIGN	Practice Papers and Questions		Adjusted to the time spent assignments, or the amount of achieving competency in this co	Adjusted to the time spent discussing or working on assignments, or the amount of contribution an ability makes to achieving competency in this course.						
ASSIGNMENT	Explain concepts, estimates and	Explain concepts, estimates and projections based on study topics at meetings 1-7 and 9-15								
TITLE	Task URL in LMS:									
Sub-CPMK	Students can understand basic concepts mathematics, images and functions; linear and quadratic equations, equations dynamic and differential, functions exponential, growth and equality differential algebra matrices and mathematics finance.									
DESCRIPTION	Explaining concepts base math and solve problem economy with approach mathematics									
ASSIGNMENT METHODS	Assignments are carried out in accordance with the instructions of the teaching lecturer									
TASK OBJECT	Calculation practice papers and	questions linear and quadratic ed	quations							
TASK OUTPUT	Papers and calculation results			-						
	Criteria &	Indicators	Assessment Techniques	Weight (%)						
	- Retention of material		Holistic Rubric	- 40%						
EVALUATION	- Quiz/Practice Questions	S		- 30%						
	- Independent task			- 30%						
	Note : This assignment as a who	ole has a weight of 50% of the as	sessment for this course							
	Sta	ges	Ti	me						
	- Topics 1 – 5		- March 15, 2021 – April 26, 2021							
TIMETABLE	- Midterm exam		- May 4, 2021							
	- Topics 7 – 10		- May 10, 2021 – June 2	1, 2021						
	- Final exams		- July 26, 2021							
	- Inputting Exam Result	Values	- 27 July – 15 August 20	21						

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	Rosser, Mike. 2003 . " Basic Mathematics for Economics " 2 ed, Routledge. Taylor & Francis
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	Chiang, Alpha C. And Kevin Wainwright. 2005. " Fundamental Methods of Mathematics
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	Assauri, Sofjan. Economic math. Jakarta: Rajawali Press. 2009.
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	Dumairy . Mathematics Applied For Business and Economics . Edition Second . Yogyakarta: BPFE.2012.
	Handoko, T. Hani. Basics of Management and Operations. 7th Edition. Yogjakarta : BPFE. 1999.
	Josep Bintang Kalangi. Economics and Business Mathematics, 4th edition Book 1. Jakarta: Salemba Four, 2018.
	Schroeder, Roger. Decision Making in an Operation . 3rd Edition. Jakarta : Erlangga.2001.
	Weber JE (1982). Mathematical analysis : business and economic applications (4th ed.). Harper & Row.
	Zahri, Syahriman Yusi Imron. Economic Mathematics (Theory and Applications). Jakarta: Mitra Discourse Media. 2017.

# **CPL ASSESSMENT AND ACHIEVEMENTS**

TOPIC	SUNDAY	CPL	СРМК	Sub-CPMK	ASSESSMENT	WEIGHT (%)	CATEGORY
Ι	1	1,2,3,4	1	1	Assignment, Group Presentation ( Work Group)	3.5%	Online
II	2	1,2,3,4	1	2	Assignments, Group Presentations ( Work Group	3.5 %	Online
III	3	1,2,3,4	1,2	3	Assignments, Group Presentations ( Work Group	3.5 % _	Online
IV	4	1,2,3,4	1,2	4	Assignments, Group Presentations ( Work Group	3.5%	Online
V	5 – 7	1,2,3,4	1,2	5 -7	Assignments, Group Presentations ( Work Group	6.5%	Online
VI	8	1,2,3,4	1,2	1,2,3,4,5 ,6,7	Assignment	30%	Online
VII	9 – 11	1,2,3,4	1	9,10,11	Assignments, Group Presentations ( Work Group	6.5%	Online
IX	12 - 13	1,2,3,4	1	12,13	Assignments, Group	6%	Online

TOPIC	SUNDAY	CPL	СРМК	Sub-CPMK	ASSESSMENT	WEIGHT (%)	CATEGORY
					Presentations (		
X	14	1,2,3,4	1	14	Assignments, Group Presentations ( Work Group	3.5%	Online
XI	15	1,2,3,4	1	15	Assignments, Group Presentations ( Work Group	3.5%	Online
XI	16	1,2,3,4	1	9,10,11,12,13,14,15	Assignment	30%	Online

# ASSESSMENT AND ASSESSMENT SCALE

	EVALUATION		SCORING SCALE			
ASPECT	ТҮРЕ	<b>PROPORTION (%)</b>	INTERVALS	LETTER		
Absence	-	5	80 - 100	А		
Activity completion	-	10	65 - < 80	В		
	Quiz	5	50 - < 65	С		
Formative Assessment	Task 1	5	40 - < 50	D		
	Task other	5	0 - < 40	E		
	Task project	40				
Summative Assessment	UTS	15				
	UAS	15				

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Makassar, 20 June 2021



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