

	MODULE DESCRIPTION PRODI S1 FARMASI-JURUSAN KIMIA FMIPA UNIB					S1F-27
	PHARMACOTHERAPY OF ENDOCRINE AND CARDIOVASCULAR SYSTEM					
	Module Code: FRS-442	Credit Points (T/P): (2/0)	Semester: IV	Module Group: Farmasi Klinis dan Komunitas	Coord of Study: Dwi Dominica, S.Farm., M.Farm., Apt	
Preparation Date: 00	Last Amandemnet Date: -		Responsible Person: Dian Handayani.,S.Farm.,M.Farm.,Apt (DH) Agung Giri Samudera.,S.Farm.,M.Sc.,Apt (AGS)	M.Farm., Apt	Authorization: 	

Intended Learning Outcome (ILO/CP)	ILO/CP-PRODI : 1. (STN11)-Able to be responsible for individual or group assignment; 2. (STN14) -Able to act according to statutory provisions, norms, and pharmaceutical ethics. 3. (KU5) – Able to make appropriate decisions in order to solving problems in their expertise area based on the results of analysis of information and data. 4. (KK2)- Identify drug related problem and alternative solutions. 5. (P7) – Explain consideration drug of choice. 6. (P10) – Able to give drug and medication information.
	CP-Module: 1. Able to understand management of therapy in endocrine and cardiovascular system 2. Able to practice counseling for patients and identify any factors related to outcome therapy
Short Description	Pharmacotherapy of endocrine and cardiovascular system discuss about management and any factors related to outcome therapy of diabetes melitus; cushing syndrome; thyroid diseases; addison disease; syndrome conn's; meningitis; arrhythmia and thrromboembolism; hypertensi, acute myocardial infraction; heart failure; and acute coronary syndrome (angina)

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S1F-1 : Capaian Pembelajaran Prodi	S1F-2 : Silabus Mata Kuliah	S1F-3 : Peta CP-MK	S1F-4 : Rencana Pembelajaran	S1F-5 : Rencana Evaluasi	S1F-6 : Uraian Tugas

Module Content	Definition of disease; Epidemiology Etiology Management therapy Case					
Recommended Literature	Primary literature: 1. Pharmacotherapy Dipiro 2. Handbook of Clinal Drug Data 3. Pharmacotherapy Principal and Practice 4. Koda-Kimble & Young's Applied Therapeutics Secondary literature: 1. American Assosiation of Clinal Endocrinologist Medical Guidelines for Clinical Practice for Developing Diabetes Mellitus Comprehensive Care Plan 2. Drug Information Handbook 3. Therapeutic Guidelines 4. Research Journal https://ejournal.unisba.ac.id/index.php/Farmasyifa					
Planned use/applicability	Software: OS:Windows; Office Hardware : PC & LCD Projector					
Team Teaching	Dian Handayani.,S.Farm.,Apt.,M.Farm (DH) Agung Giri Samudera.,S.Farm.,Apt.,M.Sc (AGS)					
Admission Requirement	Anatomy Physiology of Endocrine & Cardiovascular System (FRS-253/3 sks) Pharmacology of Endocrine & Cardiovascular System (FRS-392/2 sks)					
Week	Sub-ILO/CP-Module	Indicator(s)	Assessment Types	Teaching Method(s) and Work Load [&Time Estimation]	Module Content [&Literature]	Assessment Percentage (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

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1,2	1. Able to understand and analyze factor related to outcome therapy of diabetes mellitus (STN14, KU5, KK2, P8)	• Accuracy in explain of diabetes mellitus disease. • Accuracy in explain types of antidiabetic drugs • Accuracy in explain management therapy of diabetes mellitus	• Quiz • Case study of diabetes mellitus	• Discourse and group discussion, [TM: 2x(2x50")] • Journal and PPT reading [TM: 2 x (2x50")] • (Assignment-1: explain types of antidiabetic drugs • (Assignment-2: Complete of diabetes mellitus case study	• Definition of diabetes mellitus (Dipiro, page 1205) • Classification of diabetes mellitus (Dipiro, page 1207-1209) • Management therapy of diabetes mellitus (Dipiro, page 1213-1227)	5%
3	1. Able to understand type of thyroid disease (STN-11, KU-5, KK-2, P-7) 2. Able to analyze management therapy of thyroid disease (STN-11, KU-5, KK-2, P-7)	• Accuracy in explain type of thyroid disease • Accuracy in explain drug of choice in thyroid disease • Accuracy in explain management therapy of thyroid disease	• Case study of Grave's disease	• Discourse and group discussion, [TM: 2x(1x50")] • Journal and PPT reading [TM: 2 x (1x50")]	• Definition of thyroid disease (Dipiro, page 1243) • Classification of thyroid disease (Pharmacotherapy Principal & Practice. page 671-672) • Management therapy of thyroid disease (Dipiro, page 1250-1259)	5%

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4,5	1. Able to understand and analyze factor related to outcome therapy of cushing syndrome (STN14, KU5, KK2, P8	• Accuracy in explain of cushing syndrome disease • Accuracy in explain drug of choice in cushing syndrome • Accuracy in explain management therapy of cushing syndrome	• Case study of Cushing Syndrome	• Discourse and group discussion, [TM: 2x(2x50")] • Journal and PPT reading [TM: 2 x (2x50")]	• Definition of cushing syndrome (Dipiro, page 1267) • Etiology of Cushing Syndrome (Dipiro, page 1267) • Clinical manifestation of Cushing Syndrome (Dipiro, page 1269) • Management therapy of Cushing Syndrome (Dipiro, page 1270-1272)	5%
6	1. Able to understand and analyze factor related to outcome therapy of addison disease (STN14, KU5, KK2, P8	• Accuracy in explain of Addison Disease • Accuracy in explain drug of choice in Addison Disease • Accuracy in explain management therapy of Addison Disease	• Case study of Addison Disease	• Discourse and group discussion, [TM: 2x(1x50")] • Journal and PPT reading [TM: 2 x (1x50")]	• Definition of Addison Disease (Dipiro, page 1275) • Clinical manifestation of Addison Disease (Dipiro, page 1276) • Management therapy of Addison Disease (Dipiro, page 1277)	5%

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7	1. Able to understand and analyze factor related to outcome therapy of Syndrome Conn's (Hyperaldosteron) (STN14, KU5, KK2, P8)	• Accuracy in explain of Syndrome Conn's. • Accuracy in explain drug of choice in Syndrome Conn's • Accuracy in explain management therapy of Syndrome Conn's	• Case study of Syndrome Conn's • Quiz	• Discourse and group discussion, [TM: 2x(1x50")] • Journal and PPT reading [TM: 2 x (1x50")]	• Definition of Syndrome Conn's (Dipiro, page 1272) • Clinical manifestation of Syndrome Conn's (Dipiro, hal 1272) • Management therapy of Syndrome Conn's (Dipiro, page 1273)	5%
8	Midsemester examination					20%
9	1. Able to understand and analyze factor related to outcome therapy of arrhythmia (STN11, STN14, KU5, KK2, P8)	• Accuracy in explain of arrhythmia. • Accuracy in explain drug of choice in arrhythmia • Accuracy in explain management therapy of arrhythmia • Accuracy in explain type of arrhythmia based on ECG	• Case study • Quiz	• Discourse and group discussion, [TM: 2x(1x50")] • Journal and PPT reading [TM: 2 x (1x50")]	• Classification of arrhythmia (Koda Kimble, page 492) • Reading of ECG (Koda Kimble, page 491) • Management therapy of arrhythmia (Koda Kimble, page 493)	3%

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10	1. Able to understand and analyze factor related to outcome therapy of thromboembolism (STN 11, STN14, KU5, KK2, P8	• Accuracy in explain of thromboembolism • Accuracy in explain drug of choice in thromboembolism • Accuracy in explain management therapy of thromboembolism	• Case study • Quiz	• Discourse and group discussion, [TM: 2x(1x50")] • Journal and PPT reading [TM: 2 x (1x50")]	• Definition of thromboembolism (Koda Kimble, page 345) • Etiology of thromboembolism (Koda Kimble, page 346) • Pharmacology of antithrombotic drugs (Koda Kimble, page 347) • Management therapy of thromboembolism (Dipiro, page 374)	3%
11,12	1. Able to understand and analyze factor related to outcome therapy of hipertensi (STN11, STN14, KU5, KK2, P8	• Accuracy in explain of hipertensi • Accuracy in explain drug of choice in hipertensi • Accuracy in explain management therapy of hipertensi	• Case study • Quiz	• Discourse and group discussion, [TM: 2x(2x50")] • Journal and PPT reading [TM: 2 x (2x50")]	• Classification of hipertensi (Dipiro, page 141) • Management therapy of hipertensi (Dipiro, page 147)	3%

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13	1. Able to understand and analyze factor related to outcome therapy of acute myocardial infraction (STN11, STN14, KU5, KK2, P8)	• Accuracy in explain of acute myocardial infraction - Accuracy in explain drug of choice in acute myocardial infraction • Accuracy in explain management therapy of acute myocardial infraction	• Case study • Quiz	• Discourse and group discussion, [TM: 2x(1x50")] • Journal and PPT reading [TM: 2 x (1x50")]	• Definition of acute myocardial infraction (Koda Kimble, page 345) • Etiology of acute myocardial infraction (Koda Kimble, page 346) • Management therapy of acute myocardial infraction (Dipiro, page 374)	3%
14	1. Able to understand and analyze factor related to outcome therapy of heart failure (STN11, STN14, KU5, KK2, P8)	• Accuracy in explain of heart failure • Accuracy in explain drug of choice in heart failure • Accuracy in explain management therapy of heart failure	• Case study • Quiz	• Discourse and group discussion, [TM: 2x(1x50")] • Journal and PPT reading [TM: 2 x (1x50")]	• Definition of heart failure (Dipiro, page 174) • Pathophysiology of heart failure (Dipiro, page 175) • Management therapy of heart failure (Dipiro, page 183)	3%

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15	1. Able to understand and analyze factor related to outcome therapy of angina (STN 11, STN14, KU5, KK2, P8	• Accuracy in explain of angina • Accuracy in explain drug of choice in angina • Accuracy in explain management therapy of angina	• Case study • Quiz	• Discourse and group discussion, [TM: 2x(1x50")] • Journal and PPT reading [TM: 2 x (1x50")]	• Definition of angina (Dipiro, page 217) • Classification of angina (Dipiro, page 218) • Management therapy of angina (Dipiro, page 226)	3%
16	Final Examination					29%

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