

### Module Description: Farmacology Nursing (21R01110603)

<b>Module designation</b>	Course Module
<b>Semester(s) in which the module is taught</b>	II
<b>Person responsible for the module</b>	Dr. Yuliana Syam., S.Kep.,Ns.,M.Si (coordinator) Dr. Kadek Ayu Erika., S.Kep.,Ns.,M.Kes Dr. Andina Setiawati, S.Kep., Ns., M.Kep
<b>Language</b>	Bilingual, Bahasa Indonesia and English
<b>Relation to Curriculum</b>	This course is a compulsory course and offered in the 2 <sup>rd</sup> semester.
<b>Teaching Methods</b>	Teaching methods used in this course are: <ul style="list-style-type: none"> <li>- Lecture (i.e., SGD, Problem Based Learning, Focus Group Discussion, TPS, TGT, NHT, case study, demonstration, and video-based learning)</li> <li>- Structured assignments (i.e., report and mind mapping)</li> <li>- Practice in Nursing Laboratory (i.e., Clinical Skill Lab)</li> </ul> <p>The class size for lecture is approximately 60 students, while for clinical skill lab is about 15 -20 students for each lecturer and clinical field work is about 7 – 10 students for each lecturer.</p>
<b>Workload</b> (incl. contact hours, self-study hours)	Contact hours for lecture is 26.67 hours, assignments are 32 hours, and practice are 90,67 hours. For this course, students are required to meet a minimum of 181,33 hours in one semester, which consist of: <ul style="list-style-type: none"> <li>- 26,67 hours (equals with ECTS) for lecture,</li> <li>- 32 hours for structured assignments,</li> <li>- 32 hours for self-study hours,</li> </ul> 45,33 hours for clinical skill laboratories.
<b>Credit points</b>	3 credit points (equivalent with 4,53 ECTS)
<b>Required and recommended prerequisites for joining the module</b>	Students must have taken following courses: Basic Biomedical Science
<b>Module objectives/intended learning outcomes</b>	After completing the course and given with a Nursing Pharmacology, students will be:  <b>Knowledge:</b> <b>CLO1:</b> Mastering nursing science, information systems, and health technology to provide nursing care based on evidence-based nursing process approaches.  <b>Competence:</b> <b>CLO2:</b> Having work competencies in providing nursing care and services that can compete nationally and globally. <b>(C2).</b>
<b>Content</b>	Students will learn about:

	<ul style="list-style-type: none"> <li>- Pharmacokinetics and Pharmacodynamics of drugs within the body.</li> <li>- Drug mechanisms, drug interactions, and factors influencing drug responses.</li> <li>- Indications, contraindications of drugs, and drug toxicology.</li> <li>- Administration methods, drug formulations, and dosage calculations.</li> <li>- Legal aspects of drug management by nurses, roles and responsibilities of nurses in drug administration.</li> <li>- Drug management in children and the elderly.</li> <li>- Drug management in home care.</li> <li>- Compliance and education in drug administration; medication errors.</li> <li>- Drugs and their impact on body systems: nervous system; respiratory system; cardiovascular system, digestive system, and endocrine system.</li> <li>- Herbal, dietary supplement therapy; multivitamins, vitamins, and minerals.</li> </ul>
<b>Examination forms</b>	<p>Written exam: Multiple Choice Questions using Vignettes.</p> <p>Skill examination: Objective Structured Clinical Examination (OSCE)</p>
<b>Study and examination requirements</b>	<ul style="list-style-type: none"> <li>- Students must attend 15 minutes before the class starts.</li> <li>- Students must inform the lecturer if they will not attend the class due to sickness, etc.</li> <li>- Students must submit all class assignments before the deadline.</li> <li>- Students must attend all classes of clinical skill laboratories.</li> <li>- Student must attend OSCE to get final clinical examination grade.</li> <li>- Students must attend the exam to get final grade.</li> <li>- Students must get final mark minimum of 40</li> </ul>
<b>Reading list</b>	<ol style="list-style-type: none"> <li>1. Aschenbrenner,DS dan venable,S.J (2012). Drug Therapy in nursing. Philadelphia: Lippincott William dan wilkins.</li> <li>2. Barber.P, Robertson, D (2020) Essential of pharmacology for nurses, 4th edition. Milton Keynes. Open University Press</li> <li>3. McCuistion L.E.,Kee, J.L.,and Hayes, E.R (2014). Pharmacology; A Patient-Centered Nursing Prosess Approach. 8th ed. Saunders: Elsevier Inc.Pagana.K.D, OaganaT.J</li> <li>5. Lehne, R.A (2013). Pharmacology for nursing care: Study guide, 8th ed. Philadelphia: WB Saunders Co</li> <li>6. Prosser, S Worster, B, MacGregor, J., et.al (2010). Aplied pharmacology: an Introduction to pathophysiology and drug management for nurses and health care professional. London: Mosby</li> <li>8. John Trounce (2000): Clinical pharmacology for Nurses; sixteenth edition.,</li> <li>9. Richard A. Lehne; Pharmacology for Nursing Care (2010) 7th Edition; by Saunders, an imprint of Elsevier Inc.</li> </ol>
<b>Cluster of Competence</b>	Nursing Clinical Sciences and Skills
<b>Form of Assessments</b>	<ul style="list-style-type: none"> <li>- Class/group participation (10%)</li> <li>- Assignment: Case study report (20%), Team-based project report (10%),</li> <li>- Written Test (40%)</li> <li>- Quiz (10%)</li> <li>- OSCE (20%)</li> </ul>

<b>Date of last amendment made</b>	July 2021
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### Course Learning Outcome Assessment of Learning Outcomes for Course Modules

**Course Module Name** : Nursing Pharmacology  
**Code** : 21R01110603  
**Semester** : II  
**Person responsible for the module** : Dr. Yuliana Syam.,S.Kep.,Ns.,M.Si  
**Lecturers** : Dr. Kadek Ayu Erika.,S.Kep.,Ns.,M.Kes  
 Dr. Andina Setiawati, S.Kep., Ns., M.Kep

Intended Learning Outcomes	Course Module Objectives	List of Assessments	List of Rubrics
<p><b>Knowledge (K):</b></p> <p>Mastering the knowledge of nursing, information systems, and health technology to provide nursing care based on evidence-based nursing process approach</p>	<p><b>Knowledge:</b></p> <p><b>CLO1:</b> Students are able to explain the concepts of pharmacokinetics, pharmacodynamics, and the concepts of therapy and diet therapy. <b>(K)</b></p> <p>CLO2 : Students are able to sequence and prioritize the roles and responsibilities of nurses in medication administration</p>	<p><b>Assignment:</b></p> <ul style="list-style-type: none"> <li>- Class discussion participation/Case method: Students discuss in small groups the assigned topics/cases, and the outcomes of their discussions are compiled in the form of group discussion reports, which will then be presented in the larger class</li> </ul> <p><b>Written exam:</b> Multiple Choice Questions using Vignettes.</p> <ul style="list-style-type: none"> <li>- Mode of delivery: Online through Learning Management System (LMS) &amp; paper-based exam.</li> <li>- Total number of questions: 100.</li> </ul>	<p><b>Rubric for Multiple Choice Questions</b></p> <ul style="list-style-type: none"> <li>- Scored 1, if the answer is correct.</li> <li>- Scored 0, if the answer is wrong.</li> <li>- Final grade= Total corrected items divided by total items multiply 100.</li> </ul> <p><b>Rubric for case study report</b></p> <p><b>Rubric for Presentation</b></p>

Intended Learning Outcomes	Course Module Objectives	List of Assessments	List of Rubrics
		<ul style="list-style-type: none"> <li>- Each question must be completed within 1 minute.</li> <li>- Duration of exam: 100 minutes.</li> </ul> <p><b>Individual and group presentation</b></p>	
<p><b>Competence (C1):</b></p> <p>Having job competencies in implementing nursing care and services that can compete nationally and globally.</p>	<p><b>Competence:</b></p> <p><b>CLO3:</b> Students are able to demonstrate dosage calculation methods and show the form and presentation of drugs (CPL 2/KU1).</p>	<p><b>Clinical Skill Lab:</b></p> <p>examinations used to prevent medication errors and Drug dosage calculation and drug formulations</p> <p>Objective Structured Clinical Examination (OSCE)</p>	<p><b>Rubric for Clinical Skill Lab Observation</b></p>

**Proportion of assessment aspects according to the course learning outcomes.**

No	Code	CLO	Sub CLO	Learning Method	Metode Evaluasi						Proporsi
					Participatory Analysis	Project result	Assignment	Quis	Mid-test	Final Test	
1	K	CLO 1	Sub CLO 1	Lecture	Assignment: case study report 5%		Assignment: Paper and discussion activity 5%				10 %
				Discussion, Case method 5 %					Final test: MCQ 5 %	10 %	
			Sub CLO 2	Discussion, case method	Assignment: case study report 5%		Assignment: Paper and discussion activity 5%				10 %
				Lecture				Quis 5%		Final test: MCQ 10%	15%
3			Sub CLO 3 - 4	Discussion, case method, SGD, 5 %			Assignment: Paper and discussion activity 5%				5%
				Lecture				Cuis 5 %		Final test : MCQ 10 %	15 %
							Assignment: Paper and discussion activity 5%				10 %
4	C2	CLO 2	Sub CLO 7	CSL	OSCE 10 %					OSCE : 10 %	20%
<b>TOTAL</b>				<b>10 %</b>	<b>20 %</b>		<b>20%</b>	<b>10 %</b>	<b>0%</b>	<b>40%</b>	<b>100%</b>

### Example of Written Test Exam

1. The factors that influence drug absorption include physiological factors and physicochemical factors. Which of the following is not included as a physicochemical factor?
  - A. Solubility
  - B. Chemical stability
  - C. Surface area of absorption
  - D. Lipid-water partition coefficient
  - E. Degree of ionization
  
2. Basically, the use of drugs in therapy consists of three categories, namely:
  - A. Pharmacokinetics, Pharmacodynamics, and Diagnostics
  - B. Pharmacodynamics, Chemotherapy, and Diagnostics
  - C. Pharmacokinetics, Chemotherapy, and Diagnostics
  - D. Pharmacotherapy, Chemotherapy, and Diagnostics
  - E. Pharmacotherapy, Pharmacodynamics, and Diagnostics
  
3. What is the term in pharmacokinetics for the movement of drug molecules from their site of administration into systemic circulation?
  - A. Absorption
  - B. Distribution
  - C. Metabolism
  - D. Excretion
  - E. Elimination