



COURSE SYLLABUS



Degree Program: BS Pharmacy (2018)

Program Learning Outcomes:

PLO 1: Practice pharmacy in a professional, legal and ethical manner with commitment for continuing professional development

PLO 2: Work effectively with inter- and multi-professional teams in various settings to manage medicines-related issues of individuals, communities and health facilities

PLO 3: Communicate medicines information effectively to patients, carers, healthcare providers, community members and other stakeholders

PLO 4: Produce quality pharmaceutical products to achieve optimum health outcomes for patients and communities

PLO 5: Disseminate research findings to improve medication use, pharmacy education and pharmacy service delivery

A. Course Catalogue Description

Course Title: INTEGRATIVE MEDICINE

Course Number: CLIN PHARM 167

**Credit Units: 2
Units Lecture**

**Number of
Hours:

30 hours**

**Year Level
offered: 1st Year**

**Semester
Offered: 1st
Semester**

Meeting Type/Instructional Format: Face-to-face lectures using ARAL LMS for materials and submissions

Course Description: This course introduces the fundamental concepts and practices of pharmacy as a profession, covering its historical evolution, ethical foundations, and legal frameworks in the Philippines; it explores the diverse roles and responsibilities of pharmacists across various settings, including community, hospital, institutional, and public health, with an emphasis on applying these concepts through case discussions, role-playing scenarios, and simulated professional interactions to develop critical thinking and professional identity.

Prerequisites: None

Corequisites: None												
Course Stipulation (if any)												
Course Goals:		This course aims to provide students with a foundational understanding of the pharmacy profession's history, ethics, and legal frameworks in the Philippines. It will enable students to analyze the diverse roles of pharmacists across various settings and apply this knowledge through case discussions and simulations. Ultimately, the goal is to cultivate critical thinking and a strong professional identity essential for future practice.										
B. Relationship of Course Learning Outcomes to Program Learning Outcomes					Program Learning Outcomes							
Course Learning Outcomes					PLO1	PLO2	PLO3	PLO4	PLO5			
CLO1:	Understand the value system of the pharmacy profession and the required competencies of pharmacists in various practice settings.				I	I	I	I	I			
CLO2:	Identify significant events in the evolution of the pharmacy profession.				I	I	I	I	I			
CLO3:	Describe the different national, regional, and international organizations of pharmacy and their role in the development of the profession and practice of pharmacy.				I	I	I	I	I			
I – Introduced D- Demonstrated R- Reinforced												
C. Course Content												
Topics										Number of Hours		
I. Orientation										2 hours		
II. The Pharmacy Profession A. Overview of Scope of Practice B. Roles and Responsibilities of a Pharmacist										4 hours		
III. Practice Framework for Pharmacy A. RA 10918 Philippine Pharmacy Act B. Code of Ethics of Filipino Pharmacists										6 hours		

C. Philippine Practice Standards for Pharmacists D. Pharmacy Services National Certification III (NC III)	
IV. Pharmacy Education A. Evolution and Present Status B. Philippine Qualifications Framework	6 hours
V. History of Pharmacy A. Milestones from Ancient Ages to Modern Times B. Evolution of Pharmacy in the Philippines C. Advance Practices D. Emerging Roles	6 hours
VI. Pharmacy Practice Settings A. Professional Organizations in Pharmacy B. Invited Speakers from Different Practice Settings	6 hours
VII. Summative Exam	2 hours

D. Course Coverage

Week	Learning Outcomes	LLOs with CLOs	Course Topics	Essential or Key Questions	Teaching and Learning Activities	Assessment Methods and Tools	Core Readings/Learning Resources
1	General Objectives: <ul style="list-style-type: none"> Explain the importance of medicines in promoting and maintaining health. Describe the structure and key components of the pharmaceutical supply chain in the Philippines. Differentiate the various 	CLO1	I. Retail pharmacy in the context of the pharmaceutical supply chain A. Importance of medicines in health care	How do medicines contribute to improving health outcomes and quality of life? What are the major components of the pharmaceutical supply chain in the Philippines?	Lecture-discussion, recitations, group activities	Quiz, First Long Examination	Department of Health (DOH) & Philippine Food and Drug Administration (FDA). <i>Rules and Regulations on the Licensing of Drug Establishments</i> . Latest issuance.

	<p>types of retail drug outlets in the country.</p> <ul style="list-style-type: none"> Understand the value of pharmacy as a component of the health system. 		<p>B. The pharmaceutical supply chain in the Philippines</p> <p>C. Types of retail drug outlets including those in the public health system</p>	<p>What are the different types of retail drug outlets in the Philippines?</p> <p>How do these outlets differ in terms of services, regulation, and scope of practice?</p> <p>Why is pharmacy considered a critical component of health care delivery?</p>			<p>Desselle, S., Zgarrick, D., & Alston, G. (2012). <i>Pharmacy Management, third edition</i>. McGraw Hill Professional.</p> <p>Management Sciences for Health (MSH). <i>Managing Access to Medicines and Health Technologies (MDS-3)</i>. Arlington, VA: MSH; 2012.</p> <p>Philippine Practice Standards for Pharmacists (PPSP). Philippine Pharmacists Association; latest edition.</p> <p>Republic Act No. 10918. <i>The Philippine Pharmacy Law</i>. 2016.</p>
2	<p>Learning Objectives:</p> <ul style="list-style-type: none"> Enumerate the enabling factors for an effective pharmaceutical supply system. Explain the role of policy and legal frameworks in ensuring access to quality medicines. Analyze how financing mechanisms support sustainability and equity in medicine supply. Discuss key elements of 	CLO1, CLO2	<p>II. Enabling factors for an effective pharmaceutical supply</p> <p>A. Policy and legal framework</p> <p>B. Financing</p> <p>C. Pharmaceutical management</p> <p>D. Rational and responsible</p>	<p>What factors enable an effective and efficient pharmaceutical supply system?</p> <p>How do these factors interact to ensure the timely delivery of medicines?</p> <p>How do policy and legal frameworks ensure access to safe, effective, and quality medicines?</p> <p>In what ways do financing mechanisms influence the</p>	Lecture-discussion, recitations, group activities	Quiz, First Long Examination	

	<p>pharmaceutical management that influence medicine availability.</p> <ul style="list-style-type: none"> Evaluate strategies for promoting the rational and responsible use of medicines. Recognize the importance of management support systems in strengthening pharmaceutical supply chains. 		<p>le use of medicines</p> <p>E. Management support systems</p>	<p>sustainability and equity of medicine supply?</p> <p>What are the key elements of pharmaceutical management that determine medicine availability?</p> <p>Why is responsible medicine use important for both public health and health system sustainability?</p> <p>Why are management support systems (e.g., information systems, human resources, logistics) critical in strengthening pharmaceutical supply chains?</p>			
3	<p>Learning Objectives:</p> <ul style="list-style-type: none"> To define the regulatory bases for requirements in setting up a pharmacy To enumerate the requirements for application 	CLO1, CLO2	<p>III. Requirements for establishing drug outlets</p> <p>A. FDA Requirements</p>	<p>What are the regulatory bases that govern the establishment of a pharmacy in the Philippines, and why are these important in ensuring safe and</p>	Lecture-discussion, recitations, group activities	Quiz, First Long Examination	

	<p>of an initial license to operate for drug establishments and post-licensing inspections</p> <ul style="list-style-type: none"> To explain important considerations in the strategic planning 		<p>B. Site selection C. Pharmacy layout D. Personnel E. Standard Operating Procedures (SOPs)</p>	<p>effective pharmacy operations?</p> <p>What are the requirements for applying for an initial License to Operate (LTO) for drug establishments?</p> <p>How does effective strategic planning contribute to the sustainability and competitiveness of a pharmacy business?</p>			
4 - 5	<p>Learning Objectives:</p> <ul style="list-style-type: none"> Describe the different operations and processes involved in drug selection, purchasing, receiving and storage, packaging and labelling, recalls, and disposal Describe the important principles and techniques of merchandising and display Describe how to accurately process prescriptions and medication orders, including special populations, in compliance with Philippine regulatory and ethical standards. 	CLO1, CLO2	<p>IV. Pharmacy operations in various practice settings (community, hospital, institutional, public health facilities)</p> <p>a. Initial/Opening stock selection b. Processing of prescriptions</p>	<p>What are the key steps and processes involved in the drug supply cycle from selection to disposal?</p> <p>How do proper storage, packaging, and labelling practices ensure medicine quality and patient safety?</p> <p>What principles of merchandising are important in community and hospital pharmacy</p>	Lecture-discussion, recitations, group activities	Quiz, First Long Examination	

			<p>n/medication order</p> <p>i. Require Senior Citizen, Persons with Disability, PhilHealth reimbursement</p> <p>ii. Prescriptions medicines</p> <p>iii. Dangerous and controlled substances</p> <p>iv. Investigational drugs</p> <p>c. Processing of Over-the-Counter (OTC) and Pharmacist-Only</p>	<p>settings?</p> <p>How can effective product display influence patient awareness, sales, and rational medicine use?</p> <p>What are the essential steps in accurately processing prescriptions and medication orders?</p> <p>How should prescriptions for special populations (e.g., children, elderly, pregnant patients) be handled to ensure safety and compliance?</p>			
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			<p>Medication</p> <p>d. Over-the-counter and pharmacist-only medications</p> <p>i. Physical Assessment</p> <p>ii. Screening for Specific Conditions</p> <p>iii. Triaging/Referral to other Health Professionals</p>				
6 - 7	<p>Learning Objectives:</p> <p>1. Differentiate types of inventory systems and apply appropriate methods of preparing a purchase order, such as quantification and documentation, to</p>	<p>CLO1.</p> <p>CLO2</p>	<p>V. Inventory Control</p> <p>a. Types of Inventory</p> <p>b. Preparation of Purchase Order</p> <p>i. Quantification</p>	<p>What are the different types of inventory systems used in pharmacy practice, and how do they differ in application?</p> <p>How can proper quantification and documentation</p>	<p>Lecture-discussion, recitations, group activities</p>	<p>Quiz, First Long Examination</p>	

	<p>ensure efficient stock management in pharmacy practice.</p> <p>2. Describe how automation exists in pharmacy operations and explain its impact on the accuracy, safety, and efficiency of various aspects of pharmacy operations.</p>		<p>ii. Documentation</p> <p>X. Automation</p> <p>a. Barcoding</p> <p>b. RFID</p> <p>c. Patient Medication Profile</p>	<p>improve the accuracy of purchase orders?</p> <p>In what ways is automation (e.g., barcoding, RFID, electronic medication profiles) applied in pharmacy operations?</p> <p>How does automation impact accuracy, safety, and efficiency in various facets of pharmacy operations?</p> <p>What challenges might pharmacies face in implementing automation technologies, and how can these be addressed?</p>			
8 - 9	<p>Learning Objectives:</p> <p>1. Discuss the process of how to accurately receive, inspect, and document pharmaceutical deliveries, ensuring compliance with regulatory standards and</p>	<p>CLO1, CLO2</p>	<p>VI. Supplier selection and performance evaluation</p> <p>a. Receiving and checking of deliveries</p>	<p>How can pharmacists ensure accuracy, compliance, as well as identify discrepancies when receiving and documenting pharmaceutical deliveries?</p>	<p>Lecture-discussion, recitations, group activities</p>	<p>Quiz, First Long Examination</p>	

	<p>identifying discrepancies.</p> <ol style="list-style-type: none"> 2. Explore the different regulatory requirements and practices for packaging and labeling 3. medications to ensure product safety, compliance, and accurate communication of essential drug information. 4. Explain the importance of proper pharmaceutical storage according to Good Storage 5. Practices, including maintaining the cold chain, to ensure the integrity and quality of medications in compliance with safety guidelines. 6. Utilize inventory management principles to forecast demand and implement effective re- 7. ordering systems, maintaining optimal stock levels and minimizing wastage. 		<ol style="list-style-type: none"> b. Packagin g and labeling c. Storage and cold chain d. Forecasti ng and re-orderi ng 	<p>What regulatory requirements and best practices must be followed in packaging and labeling medications to guarantee safety and accurate drug information?</p> <p>Why is proper pharmaceutical storage, including cold chain management, essential for preserving the integrity and quality of medicines?</p> <p>How can inventory management principles be applied to forecast demand, optimize stock levels, and minimize medicine wastage?</p>			
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10	<p>Learning Objectives</p> <ol style="list-style-type: none"> 1. Discuss and define pharmaceutical returns and recalls 2. Explain the various reasons that pharmaceuticals may be returned or recalled 3. Identify different classes of drug recalls 4. Discuss the process of drug recall in the Philippine setting 5. Discuss and differentiate the roles of the patient and pharmacist/HCP in situations of drug returns or recalls 6. Discuss the importance of safe disposal for unwanted pharmaceuticals 7. Explain the importance of sorting pharmaceuticals into categories that require different disposal methods 8. Differentiate the various methods for disposing 	CLO1. CLO2	<p>VII. Other Aspects of the Operation</p> <ol style="list-style-type: none"> a. Pharmaceutical returns and recalls b. Disposal of Bad Stocks – damaged, expired medicines, returns 	<p>What are returns and recalls as it pertains to pharmacy, and what are some valid reasons that pharmacies may encounter this?</p> <p>How are drug recalls classified and processed in the Philippines?</p> <p>Why should unwanted pharmaceuticals be disposed of properly?</p> <p>How can proper pharmaceutical waste disposal practices be adhered to, following national or international guidelines, policies, and regulations</p> <p>What are the various ways that unwanted pharmaceuticals can be safely disposed of, and how is the</p>	Lecture-discussion, recitations, group activities	Quiz, First Long Examination	

	<p>unwanted pharmaceuticals</p> <p>9. Identify the appropriate disposal method for a sorting category</p>			<p>appropriate method determined?</p>			
11 - 12	<p>Learning Objectives:</p> <ol style="list-style-type: none"> 1. Understand the objectives and outcomes of pharmacy services 2. Discuss the different considerations in setting up pharmaceutical services in a pharmacy 3. Enumerate and describe the steps in setting up a value-added pharmacy service 	<p>CLO1, CLO2, CLO3</p>	<p>VIII. Implementing Value-added Pharmacy Services</p> <ol style="list-style-type: none"> a. Required competencies b. Health and wellness c. Clinical services 	<p>What are the primary objectives of pharmacy services, and how do they contribute to patient care and health system outcomes?</p> <p>What key factors should be considered when establishing pharmaceutical services in a pharmacy to ensure effectiveness, sustainability, and patient-centered care?</p> <p>What are the essential steps in developing and implementing a value-added pharmacy service, and how do these steps ensure its success?</p>	<p>Lecture-discussion, recitations, group activities</p>	<p>Quiz, First Long Examination</p>	

13	<p>Learning Objectives</p> <ol style="list-style-type: none"> 1. Define medication safety and patient safety goals 2. Describe different policies and guidelines on medication safety 3. Evaluate methods for addressing patient safety concerns with emphasis on medication order processing 	CLO1, CLO2	IX. Medication Safety	<p>What is medication safety, and how do patient safety goals guide the practice of pharmacy?</p> <p>What policies and guidelines support medication safety, and how do they ensure safe pharmacy operations?</p> <p>What methods can be used to address patient safety concerns, particularly in medication order processing, and how effective are they?</p>	Lecture-discussion, recitations, group activities,	Quiz, First Long Examination	
14	FIRST EXAMINATION						
15	<p>Learning Objectives:</p> <ol style="list-style-type: none"> 1. Define different outcomes relevant to measuring the success of implementing pharmacy services 2. Describe specific measures from each outcome that can be considered in the 	CLO1, CLO2, CLO3	XI. Measuring the Success of Pharmacy Services <ol style="list-style-type: none"> a. Medication adherence b. Patient satisfaction c. Cost-savings 	<p>What types of outcomes (ECHO) can be used to determine the success of implementing pharmacy services?</p> <p>What specific measures can be applied to each outcome to assess the</p>	Lecture-discussion, recitations, group activities	Quiz, Comprehensive Examination	<p>Department of Health (DOH) & Philippine Food and Drug Administration (FDA). <i>Rules and Regulations on the Licensing of Drug Establishments</i>. Latest issuance.</p> <p>Desselle, S., Zgarrick, D., & Alston, G. (2012).</p>

	<p>implementation of pharmacy services that can be used to measure its success</p> <p>3. Identify ways that a pharmacy can maintain the sustainability of implementing pharmacy services</p>			<p>effectiveness of pharmacy services?</p> <p>How can a pharmacy ensure the long-term sustainability of its implemented services?</p>			<p><i>Pharmacy Management, third edition.</i> McGraw Hill Professional.</p> <p>Management Sciences for Health (MSH). <i>Managing Access to Medicines and Health Technologies (MDS-3).</i> Arlington, VA: MSH; 2012.</p> <p>Philippine Practice Standards for Pharmacists (PPSP). Philippine Pharmacists Association; latest edition.</p> <p>Republic Act No. 10918. <i>The Philippine Pharmacy Law.</i> 2016.</p>
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COMPREHENSIVE EXAMINATION

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E. Course Requirements

1 Quizzes

2 Examinations

3 Class Activities and Participation

F. Assessment Plan (formative and summative evaluation)

COURSE ASSESSMENT PLAN

Assessment Component	Type of Assessment	Course Learning Outcomes		
		CLO1	CLO2	CLO3
Written Exam 1 (25%)	Formative	MCQ True or False Matching Identification	MCQ True or False Matching Identification Case with Computations	
Written Exam 2 (25%)	Summative	MCQ True or False Matching Identification	MCQ True or False Matching Identification Case with Computations	Case Scenario
Quizzes (25%)	Formative	True or False Identification	True or False Identification	True or False Identification
Activities (20%)	Formative	Rubric	Rubric	Rubric
Class Participation (5%)	Formative	Rating Scale, Observation	Rating Scale, Observation	Rating Scale, Observation

G. References

1	Management Sciences for Health (MSH). <i>Managing Access to Medicines and Health Technologies (MDS-3)</i> . Arlington, VA: MSH; 2012.
2	Republic Act No. 10918. <i>The Philippine Pharmacy Law</i> . 2016.
3	Department of Health (DOH) & Philippine Food and Drug Administration (FDA). <i>Rules and Regulations on the Licensing of Drug Establishments</i> . Latest issuance.
4	Philippine Practice Standards for Pharmacists (PPSP). Philippine Pharmacists Association; latest edition.

H. List of Faculty

1	Yolanda R. Robles, RPh, M Pharm, PhD – Lecture Course coordinator Professor Department of Clinical, Social and Administrative Pharmacy
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2	Margarita M. Gutierrez, RPh, MHPEd, PhD Associate Professor Department of Clinical, Social and Administrative Pharmacy
3	Frances Lois U. Ngo, RPh, MHSS Assistant Professor Department of Clinical, Social and Administrative Pharmacy
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