

**CENTRO ESCOLAR UNIVERSITY**

Manila \* Malolos

**School of Pharmacy**

**LADDERIZED PHARMACY PROGRAM**  
**FOUR-YEAR PROGRAM LEADING TO THE DEGREE**  
**BACHELOR OF SCIENCE IN PHARMACY**  
**FIVE-YEAR PROGRAM LEADING TO THE DEGREE**  
**BACHELOR OF SCIENCE IN CLINICAL PHARMACY**  
 Effective School Year 2020-2021

**FIRST YEAR**

First Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PCPM100	Introduction to the Health Care System	2	0	0	2	2	0	0	2	NONE
PCPM101	Perspectives in Pharmacy	2	0	0	2	2	0	0	2	NONE
PRPM110	Pharmaceutical Botany with Taxonomy	3	2	0	5	3	6	0	9	NONE
PRPM111	Pharmaceutical Inorganic Chemistry (with Qualitative Analysis)	3	2	0	5	3	6	0	9	NONE
PRPM120	Introduction to Pharmacy Administration Management and Leadership	2	0	0	2	2	0	0	2	NONE
COLA11	Purposive Communication	3	0	0	3	3	0	0	3	NONE
COSH31	Art Appreciation	3	0	0	3	3	0	0	3	NONE
COSH43	The Life and Works of Rizal	3	0	0	3	3	0	0	3	NONE
COPE21	<b>PATH-FIT 1: Movement Competency Training</b>	2	0	0	2	2	0	0	2	NONE
COSH11	Empowering the Self	2	0	0	2	2	0	0	2	NONE
<b>TOTAL</b>		<b>25</b>	<b>4</b>	<b>0</b>	<b>29</b>	<b>25</b>	<b>12</b>	<b>0</b>	<b>37</b>	

**Second Semester**

Second Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PCBI101	Human Anatomy and Physiology with Pathophysiology	3	2	0	5	3	6	0	9	NONE
PRPM112	Pharmaceutical Organic Chemistry	3	1	0	4	3	3	0	6	PRPM111
PRPM140	Pharmaceutical Calculations & Techniques	2	1	0	3	2	3	0	5	NONE
PRPM141	Pharmaceutical Analysis 1	3	1	0	4	3	3	0	6	NONE
COMA11	Mathematics in the Modern World	3	0	0	3	3	0	0	3	NONE
COPY11	Understanding the Self	3	0	0	3	3	0	0	3	NONE
COSH41	Readings in Philippine History	3	0	0	3	3	0	0	3	NONE
COPE22	<b>PATH-FIT 2: Swimming/Recreation</b>	2	0	0	2	2	0	0	2	NONE
COSH21	Religion: History and Texts	3	0	0	3	3	0	0	3	NONE
<b>TOTAL</b>		<b>25</b>	<b>5</b>	<b>0</b>	<b>30</b>	<b>25</b>	<b>15</b>	<b>0</b>	<b>40</b>	

**SECOND YEAR**

First Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PRPM113	Pharmaceutical Biochemistry	3	2	0	5	3	6	0	9	PRPM112
PRPM114	Pharmaceutical Microbiology and Parasitology	3	2	0	5	3	6	0	9	PCBI101
PRPM121	Dispensing 1	1	1	0	2	1	3	0	4	PRPM140
PRPM142	Pharmaceutical Dosage Forms, Drug Delivery Systems and Medical Devices	2	2	0	4	2	6	0	8	PRPM140
PRPM143	Physical Pharmacy	3	1	0	4	3	3	0	6	PRPM140
COSH32	Ethics	3	0	0	3	3	0	0	3	NONE
COPE23	<b>PATH-FIT 3: Dance/Individual-Dual Sports</b>	2	0	0	2	2	0	0	2	NONE
CONP11	NSTP 1	3	0	0	3	3	0	0	3	NONE
<b>TOTAL</b>		<b>20</b>	<b>8</b>	<b>0</b>	<b>28</b>	<b>20</b>	<b>24</b>	<b>0</b>	<b>44</b>	

**Second Semester**

Second Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PCPM102	Pharmacy Informatics	1	1	0	2	1	3	0	4	PRPM142
PRPM144	Pharmaceutical and Medicinal Organic Chemistry	3	1	0	4	3	3	0	6	PRPM112
PRPM145	Pharmaceutical Analysis 2 with Instrumentation	2	1	0	3	2	3	0	5	PRPM141
PRPM146	Pharmacognosy and Plant Chemistry	3	2	0	5	3	6	0	9	PRPM110, PRPM113
PRPM147	Pharmacology 1	3	0	0	3	3	0	0	3	PCBI101, PRPM114
PRPM160	Introduction to Complementary and Alternative Medicine	1	0	0	1	1	0	0	1	PCPM100
CONS21	Science, Technology, and Society	3	0	0	3	3	0	0	3	NONE
COSH42	The Contemporary World	3	0	0	3	3	0	0	3	NONE
COPE24	<b>PATH-FIT 4: Team Sports/Games</b>	2	0	0	2	2	0	0	2	NONE
COSH22	Man, Church and Society	3	0	0	3	3	0	0	3	NONE
CONP12	NSTP 2	3	0	0	3	3	0	0	3	CONP11
<b>TOTAL</b>		<b>27</b>	<b>5</b>	<b>0</b>	<b>32</b>	<b>27</b>	<b>15</b>	<b>0</b>	<b>42</b>	

**THIRD YEAR**

First Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PRPM122	Dispensing 2	2	1	0	3	2	3	0	5	PRPM121, PRPM142
PRPM123	Social and Administrative Pharmacy	1	0	0	1	1	0	0	1	NONE
PRPM148	Biopharmaceutics and Pharmacokinetics	3	0	0	3	3	0	0	3	PRPM143
PRPM149	Pharmaceutical Manufacturing and Quality Assurance	2	2	0	4	2	6	0	8	PRPM141, PRPM142, PRPM143
PRPM150	Drug Discovery and Development	2	0	0	2	2	0	0	2	PRPM142, PRPM144
PRPM151	Pharmacology 2	3	1	0	4	3	3	0	6	PRPM147
PRPM161	Clinical Pharmacy and Pharmacotherapeutics 1	3	0	0	3	3	0	0	3	PRPM147
PRPM191	Undergraduate Research 1	1	2	0	3	1	6	0	7	PCBI101, PRPM145, PRPM146, PRPM147
COLA21	Malikhaing Komunikasyon Gamit ang Panitikang Popular	3	0	0	3	3	0	0	3	NONE
COLA51	Expository Writing for Global Communication	3	0	0	3	3	0	0	3	NONE
<b>TOTAL</b>		<b>23</b>	<b>6</b>	<b>0</b>	<b>29</b>	<b>23</b>	<b>18</b>	<b>0</b>	<b>41</b>	

Second Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PRPM121	Pharmaceutical Marketing and Entrepreneurship	2	0	0	2	2	0	0	2	PRPM120, PRPM123
PRPM125	Hospital Pharmacy	2	1	0	3	2	3	0	5	PCPM100, PRPM122, PRPM123
PRPM126	Health Technology Assessment, Health Policy and Pharmacoeconomics	2	0	0	2	2	0	0	2	PRPM103
PRPM127	Legal Pharmacy and Ethics	3	0	0	3	3	0	0	3	PRPM149
PRPM128	Public Health Pharmacy and Pharmacoepidemiology	3	0	0	3	3	0	0	3	PRPM114
PRPM152	Cosmetic Product Development	1	1	0	2	1	3	0	4	PRPM149
PRPM153	Pharmaceutical Toxicology	2	1	0	3	2	3	0	5	PRPM151
PRPM162	Clinical Pharmacy and Pharmacotherapeutics 2	3	1	0	4	3	3	0	6	PRPM161
PRPM192	Undergraduate Research 2	1	2	0	3	1	6	0	7	PRPM191
PRPM199	Interprofessional Education and Practice	1	0	0	1	1	0	0	1	PRPM123, PRPM151
COCE51	Internet of Things	3	0	0	3	3	0	0	3	NONE
<b>TOTAL</b>		<b>23</b>	<b>6</b>	<b>0</b>	<b>29</b>	<b>23</b>	<b>18</b>	<b>0</b>	<b>41</b>	

**FOURTH YEAR**

First Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PRPM180	Integrated Pharmaceutical Science 1	3	0	0	3	3	0	0	3	PRPM121, PRPM122, PRPM123, PRPM125, PRPM126, PRPM127, PRPM128, PRPM148, PRPM149, PRPM150, PRPM151, PRPM152, PRPM153, PRPM161, PRPM191, PRPM192, PRPM199
PRPM181	Pharmacy Practice Experience ( <i>Institutional</i> , <i>Public Health and Regulatory Pharmacy</i> )- 300 hrs.	0	0	6	6	0	0	17	17	
PRPM182	Pharmacy Practice Experience ( <i>Community</i> ) - 300 hrs.	0	0	6	6	0	0	17	17	
COLA31	Foreign Language 1	3	0	0	3	3	0	0	3	NONE
<b>TOTAL</b>		<b>6</b>	<b>0</b>	<b>12</b>	<b>18</b>	<b>6</b>	<b>0</b>	<b>34</b>	<b>40</b>	

Second Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PRPM183	Integrated Pharmaceutical Science 2	3	0	0	3	3	0	0	3	PRPM121, PRPM122, PRPM123, PRPM125, PRPM126, PRPM127, PRPM128, PRPM148, PRPM149, PRPM150, PRPM151, PRPM152, PRPM153, PRPM161, PRPM191, PRPM192, PRPM199
PRPM184	Pharmacy Practice Experience ( <i>Hospital</i> ) - 300 hrs.	0	0	6	6	0	0	17	17	
PRPM185	Pharmacy Practice Experience ( <i>Industry</i> ) - 300 hrs.	0	0	6	6	0	0	17	17	
COLA32	Foreign Language 2	3	0	0	3	3	0	0	3	NONE
COSH12	Living and Loving Relationships	2	0	0	2	2	0	0	2	NONE
<b>TOTAL</b>		<b>8</b>	<b>0</b>	<b>12</b>	<b>20</b>	<b>8</b>	<b>0</b>	<b>34</b>	<b>42</b>	

**FIFTH YEAR**

First Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PRPM119C	Immunology	3	0	0	3	3	0	0	3	BS Pharmacy Graduates
PRPM130C	Health Care Administration and Management	3	0	0	3	3	0	0	3	
PRPM158C	Applied Pharmacokinetics and Pharmacogenomics	3	0	0	3	3	0	0	3	
PRPM170C	Drug Information and Literature Evaluation	3	0	0	3	3	0	0	3	
PRPM171C	Parenteral Therapy	3	0	0	3	3	0	0	3	
PRPM172C	Therapeutics 1: Respiratory, Gastroenterology, EENT and Dermatology	3	0	0	3	3	0	0	3	
PRPM173C	Therapeutics 2: Nephrology, Cardiology	3	0	0	3	3	0	0	3	
PRPM174C	Therapeutics 3: Endocrinology, Gynecology, Urology	3	0	0	3	3	0	0	3	
	<b>TOTAL</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	

Second Semester										
Class Code	Descriptive Title	Units				No. of Hours				Pre-requisite
		Lec	Lab	Int	Total	Lec	Lab	Int	Total	
PRPM137C	Pharmacy Ethics and Professional Responsibility	3	0	0	3	3	0	0	3	BS Pharmacy Graduates
PRPM138C	Environmental Health, Public Health and Population Based Care	3	0	0	3	3	0	0	3	
PRPM159C	Non-Prescription Drugs, Herbal Products and Nutraceuticals	3	0	0	3	3	0	0	3	
PRPM175C	Ambulatory Care	3	0	0	3	3	0	0	3	
PRPM176C	Introduction to Advanced Pharmacy Practice Experience	3	0	0	3	3	0	0	3	
PRPM177C	Therapeutics 4: Self-Care and Drug Induced Diseases	3	0	0	3	3	0	0	3	
PRPM178C	Therapeutics 5: Infectious Diseases, Neurology, Psychiatry	3	0	0	3	3	0	0	3	
PRPM179C	Therapeutics 6: Oncology	3	0	0	3	3	0	0	3	
	<b>TOTAL</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>24</b>	

Total No. of Units: 263