
Course Outcomes (COs)

Program: pharm D

Batch: 2nd year



Nirmala College of Pharmacy, Muvattupuzha

Muvattupuzha, P.O. Ernakulam District Kerala, India, Pin: 686661

Email : info@nirmalacp.org, Phone : 04852836888

Course Outcome

Institute	Nirmala College of Pharmacy, Muvattupuzha				
Course	Pharm D				
Batch	2021-2027				
Semester	2				
Subject	Pathophysiology				
Sl.No	CO Code	Course Outcome	Description	Bloom Level	Created_by
1	CO1	Knowledge of the etiology of various conditions		Understand	ANU MOL SAJU
2	CO2	Understanding of basic pathophysiological mechanisms of various conditions with reference to its pharmacological applications		Understand	ANU MOL SAJU
3	CO3	Thorough knowledge of the signs and symptoms of various conditions		Understand	ANU MOL SAJU
4	CO4	Understand the complications of various conditions, transmission and preventive measures		Understand	ANU MOL SAJU
5	CO5	Acquire skills and knowledge for patient and community education on the various diseases		Analyze	ANU MOL SAJU

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Course Outcome

Institute	Nirmala College of Pharmacy, Muvattupuzha		
Course	Pharm D		
Batch	2021-2027		
Semester	2		
Subject	Pharmacognosy & Phytopharmaceuticals Theory		

SlNo	CO Code	Course Outcome	Description	Bloom Level	Created_by
1	CO1	Describe the evolution & scope of pharmacognosy, plant cell and its inclusions, sources of crude drugs & will be able to classify crude drugs based on different parameters.	Describes the basic concepts of pharmacognosy, defines the terminologies covered under pharmacognosy, basic idea on plant cell, generalizes the classification of crude drugs with suitable examples that are of pharmacognostic importance, elaborates the development of pharmacognosy through various periods and stages, emphasizes the scope of pharmacognosy in pharmaceutical areas.	Understand	Lins Mary Joy
2	CO2	Gain knowledge over medicinal uses of various phytoconstituents and learn the pharmacognosy of crude drugs with these phytoconstituents	Gain idea about various primary and secondary metabolites of therapeutic importance and also gain idea on macroscopical and microscopical features of crude drugs which inturn helps to confirm the identity of the drug and to detect adulteration if any.	Evaluate	Lins Mary Joy
3	CO3	Discuss the importance of various parameters related to cultivation of medicinal plants, collection, processing of and storage of crude drugs having therapeutic action	Able to explain various intrinsic and extrinsic factors affecting cultivation and also will be able to explain the different methods of collection, processing and storage of crude drugs and their importance.	Understand	Lins Mary Joy
4	CO4	Gain knowledge on various plant fibers used in surgical dressings and related products	Able to describe the sources, uses and method of preparation of various plant fibres	Understand	Lins Mary Joy
5	CO5	Gain knowledge about the adulteration in crude drugs.	able to explain the possible types of adulteration and the need to detect this.	Understand	Lins Mary Joy

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Course Outcome

Institute	Nirmala College of Pharmacy, Muvattupuzha				
Course	Pharm D				
Batch	2021-2027				
Semester	2				
Subject	Pharmaceutical Microbiology Theory				
Sl.No	CO Code	Course Outcome	Description	Bloom Level	Created_by
1	CO1	On successful completion of this COURSE, students should be able to: Understand methods of classification, identification, cultivation and preservation of various microorganisms		Understand	Vidya Peter
2	CO2	Understand the principles and procedures of sterility testing as per IP, methods of sterilization, and microbiological quality control of pharmaceuticals		Understand	Vidya Peter
3	CO3	Analyze the role of disinfectants in microbiology and pharmaceutical industry		Apply	Vidya Peter
4	CO4	Discuss the concepts of immunology and interpolate the same in disease diagnosis Interpret the results of antimicrobial study of various pharmaceuticals and acquired knowledge of various Infectious disease		Understand	Vidya Peter
5	CO5	To understand the mode of transmission of disease causing microorganism, symptoms of disease, and treatment aspect		Understand	Vidya Peter

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Course Outcome

SI No	CO Code	Course Outcome	Description	Bloom Level	Created_by
1	PD 2.4.1	After successful completion of the course student should have an in depth knowledge of general pharmacological aspects like: pharmacokinetic and pharmacodynamic properties of drugs	Unit 1-General Pharmacology	Apply	Arya V S
2	PD 2.4.2	After completion students should understand the pharmacology of drugs acting on ANS and CNS	Unit 3 and 4- ANS and CNS drugs	Understand	Arya V S
3	PD 2.4.3	After completion of the course students should know the pathophysiology and pharmacology of drugs acting against CVDs	Unit 3- Pharmacology of Drugs acting on Cardiovascular System	Understand	Arya V S
4	PD 2.4.4	After completion the students should acquire the knowledge of drugs useful in respiratory system disorders	Unit 5-Pharmacology of drugs acting on respiratory system	Understand	Arya V S
5	PD 2.4.5	To understand the pharmacology of drugs useful in hormonal imbalance or deficiency associated conditions	Unit 6-Pharmacology of hormonal drugs	Remember	Arya V S
6	PD 2.4.6	Discuss pharmacology of autocooids	Unit 7-Pharmacology of autocooids	Understand	Arya V S

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Course Outcome

Institute	Nirmala College of Pharmacy, Muvattupuzha		
Course	Pharm D		
Batch	2021-2027		
Semester	2		
Subject	Community Pharmacy		

Sl.No	CO Code	Course Outcome	Description	Bloom Level	Created_by
1	PD.2.5.1	Know pharmaceutical care services		Understand	Merrin Joseph
2	PD.2.5.2	Respond to minor ailments and provide appropriate medication		Apply	Merrin Joseph
3	PD.2.5.3	know the business and professional practice management skills in community pharmacy		Understand	Merrin Joseph
4	PD.2.5.4	Know the concept of rational therapy		Understand	Merrin Joseph

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Course Outcome

Institute	Nirmala College of Pharmacy, Muvattupuzha
Course	Pharm D
Batch	2021-2027
Semester	2
Subject	Pharmacotherapeutics-I

Sl.No	CO Code	Course Outcome	Description	Bloom Level	Created_by
1	PD 2.6 T.4	At the end of this topic the student should be able to describe and apply the prescribing pattern for Special Populations.	General prescribing guidelines	Understand	Jobin Kunjumon Vilapurathu
2	PD 2.6 T.1	At the end of this topic the student should be able to describe the Etiopathogenesis and interpret the pharmacotherapy of diseases associated with Cardiovascular System	Cardiovascular System	Apply	Jobin Kunjumon Vilapurathu
3	PD 2.6 T.2	At the end of this topic the student should be able to describe the Etiopathogenesis and interpret the pharmacotherapy of diseases associated with Respiratory system	Respiratory system	Understand	Jobin Kunjumon Vilapurathu
4	PD 2.6 T.3	At the end of this topic the student should be able to describe the Etiopathogenesis and interpret the pharmacotherapy of diseases associated with Endocrine System	Endocrine System	Apply	Jobin Kunjumon Vilapurathu
5	PD 2.6 T.5	At the end of this topic the student should be able to describe the Etiopathogenesis and interpret the pharmacotherapy of diseases associated with Ophthalmology	Ophthalmology	Understand	Jobin Kunjumon Vilapurathu

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Course Outcome

Institute	Nirmala College of Pharmacy, Muvattupuzha
Course	Pharm D
Batch	2021-2027
Semester	2
Subject	Pharmaceutical Microbiology Practical

SI.No	CO Code	Course Outcome	Description	Bloom Level	Created_by
1	CO1	attain basic knowledge about different equipment processing used in experimental microbiology and basic sterilization methods.		Understand	Vidya Peter
2	CO2	acquire practical knowledge for sub culturing different microorganisms and their methods of isolation		Apply	Vidya Peter
3	CO3	gain practical knowledge to identify and differentiate different microorganism and their viability		Analyze	Vidya Peter
4	CO4	achieve knowledge about antibiotics and their microbiological assay and sterility testing of different pharmaceutical product		Apply	Vidya Peter
5	CO5	earn knowledge about different biochemical tests for the identification of microorganism and bacteriological analysis of water		Understand	Vidya Peter

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Course Outcome

Institute	Nirmala College of Pharmacy, Muvattupuzha
Course	Pharm D
Batch	2021-2027
Semester	2
Subject	Pharmacognosy & Phytopharmaceuticals Practical

SI.No	CO Code	Course Outcome	Description	Bloom Level	Created_by
1	PD2.3 P	Able to evaluate the macroscopical characters of crude drugs	Able to evaluate crude drugs macroscopically and can identify genuine drugs	Evaluate	Lins Mary Joy
2	PD2.3 P	Able to evaluate the microscopical characters of crude drugs	Able to evaluate crude drugs microscopically by histological studies and can identify genuine drugs	Evaluate	Lins Mary Joy
3	PD2.3P	Able to evaluate the microscopical characters of powdered drugs	Able to evaluate Powdered crude drugs microscopically and can identify genuine drugs	Evaluate	Lins Mary Joy
4	PD2.3 P	Able to evaluate the qualitative chemical evaluation of crude drugs	Able to evaluate crude drugs by chemical tests and can identify genuine drugs	Evaluate	Lins Mary Joy
5	PD2.3P	Able to evaluate the quantitative chemical evaluation of crude drugs	Able to evaluate crude drugs by determining chemical constants and can identify genuine drug	Evaluate	Lins Mary Joy

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Institute	Nirmala College of Pharmacy, Muvattupuzha
Course	Pharm D
Batch	2021-2027
Semester	2
Subject	Pharmacotherapeutics-I Practical

SI.No	CO Code	Course Outcome	Description	Bloom Level	Created_by
1	PD 2.6.2 Practical	Knowledge in analysing patient specific cases based on SOAP format		Apply	Jobin Kunjumon Vilapurathu
2	PD 2.6.3 Practical	Gain knowledge in analysing patients therapy based on clinical parameters		Evaluate	Jobin Kunjumon Vilapurathu
3	PD 2.6.1 Practical	Understand the therapeutic approach to the management of diseases and to learn the importance of preparation of individualized therapeutic plans based on the diagnosis		Analyze	Jobin Kunjumon Vilapurathu

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