

GURU NANAK INSTITUTE OF PHARMACEUTICAL SCIENCE & TECHNOLOGY
B. PHARM 1ST YEAR 1ST SEMESTER

Subject	CO label	CO Statement	BTL
PT 106	CO 106.1	Discuss the history of profession of pharmacy.	1
	CO 106.2	Understand the basics of different dosage forms, pharmaceutical incompatibilities, and pharmaceutical calculations.	2
	CO 106.3	Apply the professional way for handling the prescription.	3
	CO 106.4	Develop various conventional dosage forms.	6
PTB184	CO 184.1	Relate the salient features of five kingdom of life	1, 2
	CO 184.2	Explain the basic components of anatomy and physiology of plant.	2,5
	CO 184.3	Explain the basic components of anatomy and physiology of animal with special reference to human	2,5
	CO 184.4	Interpret the human physiological parameters.	5
PT111	CO 111.1	Recall various terminologies and stoichiometric calculations involved in Pharmaceutical Analysis.	1
	CO 111.2	Illustrate the role of pharmaceutical analysis in the profession.	2
	CO 111.3	Distinguish the various principles of conventional techniques.	4
	CO 111.4	Evaluate the various techniques and tools available for the analysis of any chemical substance.	5
PT113	CO113.1	Demonstrate the importance of pharmaceutical and medicinal effects of inorganic compounds.	2
	CO113.2	Apply pharmacopeial purity and identify tests for them.	3
	CO113.3	Categorize various major intra and extra cellular fluids, electrolytes, and their role.	2
	CO113.4	Outline various aspects of radio pharmaceuticals.	2
PT105	CO105.1	Student would have explained the gross morphology, structure, and functions of various organs of the human body.	2
	CO105.2	They would have summarized the various homeostatic mechanisms and their imbalances.	2
	CO105.3	Students can identify the various tissues, organ, and bone of different systems of human body	3
	CO105.4	They would have learnt various techniques like blood group determination, blood pressure measurement, blood cells counting & interpret the hematological test result	4
	CO105.5	Students can compare between pathology & physiology	5
	CO105.6	Students can improve their understanding on coordinated working pattern of different organs of each system	6

CO PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 106.1	3	3	2	2	3	1	1	-	-	1	2	2
CO 106.2	3	2	1	-	1	2	2	-	2	1	-	2
CO 106.3	3	3	3	2	3	2	2	2	-	1	-	3
CO 106.4	2	3	2	3	3	1	2	2	3	2	1	2
CO 196.1	3	3	2	2	2	2	2	2	2	2	-	2
CO196.2	2	3	-	1	1	-	2	3	-	1	1	2
CO105.1	3	2	2	2	1	1	1	1	1	1	1	1
CO105.2	3	1	1	1	1	1	1	1	1	1	1	1
CO105.3	3	3	2	1	1	1	1	1	1	1	1	1
CO105.4	3	3	2	2	2	2	1	1	1	1	1	1
CO105.5	2	2	2	1	1	1	1	1	1	1	1	1
CO105.6	3	3	3	2	2	1	1	1	1	1	1	1
COPTB18 4.1	1	2	1	2	1	-	-	-	1	1	1	3
COPTB18 4.2	2	2	1	2	1	-	1	-	1	1	1	3
COPTB18 4.3	3	2	2	1	2	2	2	2	3	3	3	3
COPTB18 4.4	3	3	2	1	3	2	2	2	3	3	3	3

Guru Nanak Institute of Pharmaceutical Science & Technology
B. PHARM 1ST YEAR 2ND SEMESTER

SI No	Course Outcome (CO)	Bloom's Taxonomy Level (BTL)
PT216.1	Student would have explain the etiology and pathogenesis of the selected disease states	2
PT216.2	Student can illustrate the application of pathophysiology for human welfare	2
PT216.3	They would have summarize signs & symptoms of the diseases	2
PT216.4	Students can improve their understanding on complications of the diseases.	3
PT216.5	Students can compare between pathology & physiology	5
PT205.1	Students would able to identify the various organs of different system of human body	3
PT205.2	They would have examine and learned about the experiments like neurological reflex, blood pressure monitoring, electrocardiogram	4
PT205.3	They would have understand the mechanism of olfaction, gustatory reflex and eye sight	2
PT205.4	They would have compare on interlinked mechanisms in the maintenance of normal functioning of human body.	5
PTC203.1	To know the various types of application of computers in pharmacy.	1
PTC203.2	To know the various types of databases	3
PTC203.3	know the various applications of databases in pharmacy	2
PT-213.1	Recall and understand structure, name and the types of isomerism of different classes of aliphatic organic compounds.	1,2
PT-213.2	Comprehend classification, preparation and applications of different classes of aliphatic organic compounds.	2
PT-213.3	Illustrate and analyze the reaction mechanism, orientation and stability/ reactivity of different classes of aliphatic organic compounds.	3,4
PT-214.1	Classify structure, properties, and explain the biological significance and applied energetics of carbohydrates, lipids, proteins, enzymes and nucleic acids.	2
PT-214.2	Illustrate the metabolic pathways, describe energetics and recognize the physiological and pathophysiological conditions associated with carbohydrates, lipids, proteins, enzymes and nucleic acids.	2,3

PT-214.3	Summarize the concept of biological oxidation emphasizing on ETC and oxidative phosphorylation and identifying related inhibitors.	4,5
PT-214.4	Comprehend the laws of thermodynamics and apply it to biological systems illustrating the significance of ATP.	2

Sl. No	Course outcome	Program Outcome											
		O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12
1.	PT216.1	3	3	2	3	2	2	2	3	3	2	3	3
2.	PT216.2	3	3	2	3	2	2	2	3	3	2	3	3
3.	PT216.3	3	3	3	3	3	2	1	3	2	2	2	3
4.	PT216.4	3	3	2	2	2	1	3	3	1	2	2	3
5	PT216.5	2	2	2	1	1	1	1	1	1	1	1	1
6	P205.1	3	2	3	2	2	1	1	1	1	1	1	2
7	PT205.2	3	3	3	2	2	1	1	1	1	1	1	1
8	PT205.3	3	2	2	2	2	1	1	1	1	1	1	1
9	PT205.4	3	3	3	3	3	1	1	1	1	1	1	2
10	PTC203.1	3	3	3	2	2	1	3	1	2	3	2	3
11	PTC203.2	3	2	3	3	2	3	1	2	3	3	2	3
12	PTC203.3	3	3	3	3	2	2	2	1	3	3	3	3
13	PTC293.1	3	3	3	2	2	1	3	1	2	3	2	3
14	PTC293.2	3	2	3	3	2	3	1	2	3	3	2	3
15	PTC293.3	3	3	3	3	2	2	2	1	3	3	3	3

Guru Nanak Institute of Pharmaceutical Science & Technology
B. PHARM 2ND YEAR 3RD SEMESTER

Subject	CO label	CO Statement	BTL
PT 317	CO317.1	To understand the various unit operations used in pharmaceutical industries.	2,1
	CO317.2	To interpret different material handling technique.	3
	CO317.3	To Explain different processes in pharmaceutical Manufacturing Industry.	3
	CO317.4	To elaborate different unit operations in pharmaceutical industry.	6
	CO317.5	To appraise various preventive methods used for corrosion control in pharmaceutical industry/	5
PT319	CO319.1	Understand methods of identification, cultivation and preservation of various microorganism	2
	CO319.2	Students will be able to illustrate the principles behind different techniques of sterilization of pharmaceutical products.	2
	CO319.3	Students will understand the principle behind sterility testing of pharmaceutical products	2,5
	CO319.4	Students will be able to explain the designing and classification of aseptic area for the production of sterile pharmaceuticals	2,4
	CO319.5	Students will know the applications of cell culture technology in pharmaceutical industry and research	1,2
PT399	CO399.1	Students should be able to improve knowledge regarding different type of culture media and organisms.	6
	CO399.2	Students should be able to analyze the result of different processes of sterilization.	4,2
	CO399.3	Student will be able to interpret different microbial contamination present in pharmaceutical formulation.	5
	CO399.4	Students will develop knowledge to demonstrate the method of microbiological assay.	2,3
PT314	CO314.1	Recall the structure , name and types of isomerisation of organic compounds.	1
	CO314.2	Application of knowledge to prepare various organic compounds.	3
	CO314.3	Outline the reaction mechanism, orientation and stability or reactivity of organic compounds.	2
	CO314.4	Illustrate the structural features and properties of aromatic compounds.	2
	CO314.5	Categorize different reactions of benzene and its derivatives.	4

CO PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO 317.1	2	3	2	-	-	1	-	-	-	1	-	2
CO 317.2	3	3	1	-	-	2	2	-	2	-	-	2
CO 317.3	3	3	3	2	3	2	1	2	-	-	-	3
CO 317.4	2	3	2	3	3	2	2	2	3	2	1	2
CO 317.5	3	3	2	2	2	2	2	2	2	2	-	2
CO397.1	2	3	-	1	1	-	2	3	-	1	1	2
CO397.2	1	2	3	1	2	2	2	3	-	1	-	2
CO397.3	2	3	1	2	2	1	2	1	1	3	2	2
CO397.4	2	1	1	2	1	2	1	2	-	2	1	2
CO 316.1	3	3	2	2	2	1	2	3	2	1	2	2
CO 316.2	3	3	2	2	3	2	2	3	3	2	3	3
CO 316.3	3	2	3	3	3	1	1	2	1	2	3	2
CO 316.4	3	3	3	2	1	2	3	3	3	3	3	3
CO 316.5	3	3	2	2	2	1	1	1	1	1	2	2
CO 396.1	3	3	2	2	2	1	2	3	2	1	2	2
CO 396.2	3	3	2	2	3	2	2	3	3	2	3	3
CO 396.3	3	2	3	3	3	1	1	2	1	2	3	2
CO 396.4	3	3	3	2	1	2	3	3	3	3	3	3
CO 396.5	3	3	2	2	2	1	2	1	2	1	2	2
CO319.1	3	3	1	2	3	2	1	2	3	2	2	3
CO319.2	3	3	2	2	3	1	2	2	1	2	2	2

CO319.3	3	3	1	2	3	2	2	1	3	3	3	3
CO319.4	3	3	1	2	3	2	1	2	3	2	2	3
CO319.5	3	3	2	2	3	3	1	2	3	1	2	2
CO399.1	2	3	2	-	-	1	-	-	-	1	-	2
CO399.2	3	3	-	1	-	2	2	-	-	-	-	2
CO399.3	3	3	3	2	3	2	1	2	1	-	-	3
CO399.4	2	3	2	3	3	2	2	2	2	2	-	2

Guru Nanak Institute of Pharmaceutical Science & Technology
B. PHARM 2ND YEAR 4TH SEMESTER

CO label	Course Outcome (CO) statement	Bloom's Taxonomy Level (BTL)
CO405.1	Define Pharmacognosy and its scope with different terms related to drugs from natural origin	2
CO405.2	Explain the classification of drugs from natural origin and indigenous system of medicines	4
CO405.3	List crude drugs as per their chemical nature for systematic study	2
CO405.4	Discuss the plant tissue culture, cultivation, collection, and evaluation of crude drugs	4
CO404.1	Explain the pharmacological actions of different categories of drugs	2
CO404.2	Explain the mechanism of drug action at organ system/sub cellular/macromolecular levels	2
CO404.3	Apply the basic pharmacological knowledge in the prevention and treatment of various diseases	3
CO404.4	Test the effect of drugs on animals by simulated experiments	6
CO405.4	Analyze correlation of pharmacology with other bio medical sciences	4
CO403.1	Students will be able to understand various physicochemical properties of drug molecules in the designing of dosage forms	2
CO403.2	Students will know the principles of chemical kinetics & how to use them for stability testing and determination of expiry date of formulations.	2,3
CO403.3	Students will be able to demonstrate the use of rheological properties in the formulation development and evaluation of dosage forms.	2,5
CO403.4	Students will be able to evaluate different physicochemical properties of coarse dispersions.	5
CO403.5	Students will be able to estimate the particle size distribution of a given sample and determine its inherent and derived properties	5,6
CO. 413.1	Explain the basic concept of medicinal chemistry related to drug action	2

CO.413.2	Illustrate the various phase I and phase II reactions of drug metabolism	4
CO.413.3	Classify the therapeutic agents, outline the synthetic route for the selective medicinal compounds of each category and acquire knowledge on the mechanism of action of agents acting on autonomous and central nervous system.	1, 2, 4
CO.413.4	Appraise about the relationship between the biological activity and structure of therapeutic agents.	6
CO.414.1	Illustrate Stereo-chemical features including conformation and stereo electronic effects of organic molecules.	4
CO.414.2	Comprehend the basic experimental principles of heterocyclic chemistry.	2
CO.414.3	Outline the structures and synthesis of simple five and six membered heterocyclic organic compounds.	4
CO.414.4	Describe detailed mechanisms for common naming reactions.	2

Course outcome	Program Outcome											
	O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12
CO405.1	3	3	3	3	2	1	1	2	1	1	2	3
CO405.2	3	3	3	3	2	1	1	2	1	1	2	3
CO405.3	3	2	2	1	2	2	2	2	3	3	3	3
CO405.4	3	3	2	1	3	2	2	2	3	3	3	3

CO404.1	3	1	1	2	1	2	1	1	1	1	1	1
CO404.2	3	1	2	1	1	2	1	1	1	1	1	1
CO404.3	3	2	3	1	1	2	3	1	1	1	1	1
CO404.4	3	3	3	2	2	2	2	1	1	1	1	1
CO405.4	3	3	2	2	1	1	3	1	1	1	1	1
CO403.1	3	3	1	2	3	2	1	2	3	2	2	3
CO403.2	3	3	2	2	3	1	2	2	1	2	2	2
CO403.3	3	3	1	2	3	2	2	1	3	3	3	3
CO403.4	3	3	1	2	3	2	1	2	3	2	2	3
CO403.5	3	3	2	2	3	3	1	2	3	1	2	2

Guru Nanak Institute of Pharmaceutical Science & Technology
B. PHARM 3RD YEAR 5TH SEMESTER

CO label	CO Statement	BTL
CO 511.1	Classify the therapeutic agents and outline the synthetic route for the selective medicinal compounds of each category	2
CO 511.2	Articulate on the mechanism of action of agents acting on autonomous and central nervous system	3
CO 511.3	Compare the relationship between the biological activity and structure of therapeutic agents.	6
CO 511.4	Outline the rational use of antibiotics, antineoplastic and antidiabetic drugs	4
CO514.1	Explain the Metabolic pathways in higher plants and their determination and basic of phytochemistry	5
CO514.2	Explain various crude drugs from resin, tannins, volatile oil and glycoside	4
CO514.3	Discuss the modern extraction techniques, characterization and identification of the herbal drugs and phytoconstituents	4
CO512.1	To explain different parameters required for drug delivery.	2
CO512.2	To choose proper surgical products.	3
CO512.3	To choose and justify use of proper pharmaceutical packaging materials.	1,3,5
CO512.4	Develop the ability to formulate different pharmaceutical dosage form.	6
CO512.5	To build knowledge about formulation development.	3
CO513.1	Analyze the mechanism of drug action and its relevance in the treatment of different diseases	4
CO513.2	Demonstrate isolation of different organs/tissues from the laboratory animals by simulated experiments	2
CO513.3	Demonstrate the various receptor actions using isolated tissue preparation	2
CO513.4	Justify correlation of pharmacology with related medical sciences	5

CO515.1	Awareness and Recognize about the Legislation related to Pharmacy & Pharmaceutical Sciences	2
CO515.2	To Understand and Judge the Ethics, the Pharmacy Act of India and Drugs & Cosmetics Act of India 1940 and Rules 1945	6
CO515.3	Awareness to the Responsibility towards Medicinal & Toiletries Preparation Act, Narcotics Drugs & Psychotropic Substances Act and finally Drug Price Controlling Authority norms.	2
CO515.4	To Judge, be Aware and to Appraise the wrongs of Drugs & Magic Remedies Act, MTP Act, Awareness of CPCSEA, to Understand the Shop, Factory & Patent Act.	6

Guru Nanak Institute of Pharmaceutical Science & Technology
B. PHARM 3RD YEAR 6TH SEMESTER

Code	OUTCOME	BTL
CO. 611.1	Classify and illustrate on the chemistry of Cardiovascular agents, steroids and the agents acting on central nervous system.	2, 3
CO. 611.2	Analyze and appraise on the mechanism of action of agents acting on cardiovascular system, central nervous system and steroids.	4, 6
CO. 611.3	Outline and explain the reaction scheme for synthesis of diverse medicinal compounds along with their characterization	1, 2
CO. 611.4	Interpret the rational use of steroidal and cardiovascular drugs.	6
CO612.1	Understand the pharmacological actions of different categories of drugs	2
CO612.2	Explain the mechanism of drug action at organ system/sub cellular/ macromolecular levels	2
CO612.3	Apply the basic pharmacological knowledge in the prevention and treatment of various diseases	3
CO612.4	Compare the effect of drugs on animals by simulated experiments	5
CO613.1	Explain the biosynthesis, chemistry and pharmacology of different secondary metabolites, pigments of pharmaceutical importance.	5
CO613.2	Illustrate the novel medicinal agents from marine sources and herbal cosmetics .	4
CO613.3	Evaluate the polyphenol and flavonoid in plant's extract.	4
CO613.4	Discuss the plant tissue culture and cultivation, collection, identification, preservation of important medicinal plants and herb.	6
CO 614.1	Understand the basic concepts in biopharmaceutics and pharmacokinetics and their significance.	2
CO 614.2	Evaluate the pharmacokinetic parameters to describe the kinetics of drug absorption, distribution, metabolism, excretion, elimination.	5

CO 614.3	Distinguish the concepts of bioavailability and bioequivalence study of drug products and their significance.	4
CO 614.4	Apply the knowledge of pharmacokinetic drug interactions in combination therapy.	3
CO615.1	Understand the concept of immunology and Immunological Preparations	2
CO615.2	Students will be able to explain the principles behind different techniques of Genetic Recombination.	2
CO615.3	Students will understand the historical development of antibiotics and fermentation technology to produce antibiotics.	2,5
CO615.4	Students will be able to explain the Microbial Transformation, biotransformation process and its improvements with special reference to steroids.	2,4
CO615.5	Students will know the techniques of immobilization of enzymes	1,2
CO616.1	Apply various approaches to formulate various novel drug delivery systems	3
CO616.2	Discuss the cGMP aspects in pharmaceutical industry	2
CO616.3	Classify the responsibilities of QC and QA departments	2
CO616.4	Explain the process validation methods for pharmaceutical operations	5

CO PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO. 611.1	3	3	2	2	3	1	1	-	-	1	2	2
CO. 611.2	3	2	1	-	1	2	2	-	2	1	-	2
CO. 611.3	3	3	3	2	3	2	2	2	-	1	-	3
CO. 611.4	2	3	2	2	3	1	2	2	3	2	1	2
CO612.1	3	3	2	2	2	3	2	2	2	2	-	2

CO612.2	2	3	-	1	1	-	2	3	-	1	1	2
CO612.3	2	2	3	2	3	2	1	1	1	3	3	3
CO612.4	3	1	2	2	3	2	2	3	1	2	2	2
CO613.1	2	3	1	2	3	2	3	1	3	3	3	3
CO613.2	3	2	1	2	3	2	1	2	3	2	2	3
CO613.3	3	3	2	2	3	3	1	2	3	1	2	2
CO613.4	3	3	3	3	2	1	1	2	1	1	2	3
CO 614.1	3	3	3	3	2	1	1	2	1	1	2	3
CO 614.2	3	2	2	1	2	2	2	2	3	3	3	3
CO 614.3	3	3	2	1	3	2	2	2	3	3	3	3
CO 614.4	2	2	3	2	3	2	1	1	1	3	3	3
CO615.1	3	1	2	2	3	2	2	3	1	2	2	2
CO615.2	2	3	1	2	3	2	3	1	3	3	3	3
CO615.3	3	2	1	2	3	2	1	2	3	2	2	3
CO615.4	3	3	2	2	3	3	1	2	3	1	2	2
CO615.5	3	2	1	-	1	2	2	-	2	1	-	2
CO616.1	3	3	3	2	3	2	2	2	-	1	-	3
CO616.2	2	3	2	2	3	1	2	2	3	2	1	2
CO616.3	3	3	2	2	2	3	2	2	2	2	-	2
CO616.4	2	3	-	1	1	-	2	3	-	1	1	2

Guru Nanak Institute of Pharmaceutical Science & Technology
B. PHARM 4th YEAR 7TH SEMESTER

CO label	CO Statement	BTL
CO. 711.1	Understand the electromagnetic spectrum and its interaction with matter and apply this knowledge for drug analysis	2, 3
CO. 711.2	Explain and analyze the principle, instrumentation, applications of UV, IR and Atomic Absorption Spectroscopy, Fluorimetry, Flame photometry	2, 4
CO. 711.3	Understand the chromatographic separation and analyze the drugs using these techniques	2, 4
CO. 711.4	Explain the principle and instrumentation of GC and HPLC and design their application in pharmacy/formulate their use over basic chromatography	2, 6
CO712.1	Recall various terminologies and stoichiometric calculations involved in Pharmaceutical Analysis.	1
CO712.2	Illustrate the role of pharmaceutical analysis in the profession.	2
CO712.3	Distinguish the various principles of conventional techniques.	4
CO712.4	Evaluate the various techniques and tools available for the analysis of any chemical substance.	5
CO713.1	Develop the pharmaceutical dosage forms by applying various considerations	5
CO713.2	Understand the criteria for the selection of drugs and polymers to develop the Novel drug delivery system	2
CO713.3	Apply various approaches to formulate various novel drug delivery systems	3
CO713.4	Discuss the cGMP aspects in pharmaceutical industry	2
CO713.5	Classify the responsibilities of QC and QA departments	2
CO713.6	Explain the process validation methods for pharmaceutical operations	5
CO714.1	To explain different parameters required for drug delivery.	2
CO714.2	To choose proper surgical products.	3
CO714.3	To choose and justify use of proper pharmaceutical packaging materials.	1,3,5

CO714.4	Develop the ability to formulate different pharmaceutical dosage form.	6
CO714.5	To build knowledge about formulation development.	3

CO PO MAPPING

Sl. No	Course outcome	Program Outcome											
		O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12
1.	CO 711.1	3	2	1	2	3	2	2	3	3	2	3	1
	CO 711.2	3	1	2	2	1	1	1	2	1	1	1	1
	CO 711.3	3	3	3	2	3	2	2	3	3	1	3	3
	CO 711.4	3	3	2	2	3	2	2	2	3	3	3	3
2.	CO712.1	3	3	2	2	3	1	1	2	1	1	2	2
	CO712.2	2	3	2	3	3	2	2	2	2	2	-	2
	CO712.3	2	3	2	-	-	1	-	-	-	1	-	2
	CO712.4	3	3	-	1	-	2	2	-	-	-	-	2
3.	CO713.1	3	3	3	2	3	2	1	2	1	-	-	3
	CO713.2	2	3	2	3	3	2	2	2	2	2	-	2
	CO713.3	3	3	2	2	2	2	2	2	2	2	-	2
	CO713.4	3	3	3	2	3	2	2	3	3	1	3	3
	CO713.5	3	3	2	2	3	2	2	2	3	3	3	3
	CO713.6	3	3	2	2	3	1	1	2	1	1	2	2
4.	CO714.1	3	1	1	1	-	2	3	2	1	1	1	3
	CO714.2	3	3	1	1	-	2	2	1	3	1	2	3
	CO714.3	3	-	1	1	2	3	-	3	2	2	2	2
	CO714.4	3	3	2	1	3	1	1	2	1	1	2	2
	CO714.5	3	3	3	2	3	2	1	2	1	-	-	3

Guru Nanak Institute of Pharmaceutical Science & Technology
B. PHARM 4th YEAR 8TH SEMESTER

CO label	CO Statement	BTL
CO 811.1	Demonstrate an understanding of the central concepts of modern statistical theory and their probabilistic foundation.	1
CO 811.2	Interpret results of, the principal methods of statistical inference and design.	2
CO 811.3	Communicate the results of statistical analyses accurately and effectively.	4
CO 811.4	Understand use of statistical software and learn new statistical procedures independently.	5
CO 812.1	Understand the general measures and strategies to be followed in social and preventive pharmacy.	1
CO 812.2	Knowledge about social development and current issues.	2
CO 812.3	Awareness of social disease.	4
CO 812.4	Development of preventive measure.	5
CO 813.1	Summarize the concept of basic management	2
CO 813.2	Utilize the knowledge of Accountancy, Economics, Pharmaceutical marketing	3
CO 813.3	Perceive the different laws and acts that regulate pharmaceutical industry	5
CO 813.4	Compare different concept of material management and production management	4
CO 815.1	Student can decide the best therapeutic approach to management of disease	5
CO 815.2	Students can apply the knowledge on maintenance of purchase and inventory control of drug	3
CO 815.3	Students will demonstrate knowledge of and ability to use principles of therapeutics, quality improvement, communication, economics, health behavior, aspects, health policy in the practice of pharmacy	2
CO 815.4	Students will engage in innovative activities by making use of the knowledge of clinical trials	3
CO 815.5	Students will utilize professional ethics by producing safe and appropriate medication use throughout society	3

CO PO MAPPING

Course Outcome	Program Outcome											
	O1	O2	O3	O4	O5	O6	O7	O8	O9	O10	O11	O12
CO 811.1	3	2	1	2	3	2	2	3	3	2	3	1
CO 811.2	3	1	2	2	1	1	1	2	1	1	1	1
CO 811.3	3	3	3	2	3	2	2	3	3	1	3	3
CO 811.4	3	3	2	2	3	2	2	2	3	3	3	3
CO 812.1	3	3	2	2	3	1	1	2	1	1	2	2
CO 812.2	2	3	2	3	3	2	2	2	2	2	-	2
CO 812.3	2	3	2	-	-	1	-	-	-	1	-	2
CO 812.4	3	3	-	1	-	2	2	-	-	-	-	2
CO 813.1	3	3	3	2	3	2	1	2	1	-	-	3
CO 813.2	2	3	2	3	3	2	2	2	2	2	-	2
CO 813.3	3	3	2	2	2	2	2	2	2	2	-	2
CO 813.4	3	3	3	2	3	2	2	3	3	1	3	3
CO 815.1	3	1	1	1	-	2	3	2	1	1	1	3
CO 815.2	3	3	1	1	-	2	2	1	3	1	2	3
CO 815.3	3	-	1	1	2	3	-	3	2	2	2	2
CO 815.4	3	3	2	1	3	1	1	2	1	1	2	2
CO 815.5	3	3	3	2	3	2	1	2	1	-	-	3