

Amar Shaheed Baba Ajit Singh Jujhar Singh Memorial

COLLEGE OF PHARMACY



BELA (Ropar) Punjab 140 111

M.PHARMACY (PHARMACEUTICAL CHEMISTRY)	
1st SEMESTER COURSEOUTCOMES	
Course Code: MPC101T	Course Name: Modern Pharmaceutical Analytical Techniques
MPC101.1	To know about chemicals and excipients.
MPC101.2	To know the analysis of various drugs in single and combination
	dosage forms.
MPC101.3	To learn theoretical and practical skills of the instruments
Course Code: MPC102T	Course Name: Advanced Organic Chemistry - I
MPC102.1	To learn the principles and applications of reterosynthesis
MPC102.2	To know the mechanism & applications of various named reactions
MPC102.3	To understand the concept of disconnection to develop synthetic
	routes for small target molecule.
MPC102.4	To explain various catalysts used in organic reactions.
MPC102.5	To gain the knowledge of the chemistry of heterocyclic compounds.
Course Code: MPC103T	Course Name: Advanced Medicinal Chemistry
MPC103.1	To understand the different stages of drug discovery.
MPC103.2	To explain the role of medicinal chemistry in drug research.
MPC103.3	To learn different techniques for drug discovery.
MPC103.4	To apply various strategies to design and develop new drug like
	molecules for biological targets.
MPC103.5	To learn about peptidomimetics.
Course Code: MPC104T	Course Name: Pharmaceutical Inorganic Chemistry (Theory)
MPC104.1	To learn different types of natural compounds and their chemistry
	and medicinal importance.
MPC104.2	To gain knowledge about the importance of natural compounds as
	lead molecules for new drug discovery.
MPC104.3	To understand the concept of rDNA technology tool for new drug
	discovery.
MPC104.4	To apply the general methods of structural elucidation of compounds
	of natural origin
MPC104.5	To perform isolation, purification and characterization of simple
	chemical constituents from natural source.
Course Code: MPC105P	Course Name: Pharmaceutical Chemistry Practical - I
MPC105.1	To learn analysis of Pharmacopoeial compounds and their
	formulations.
MPC105.2	To apply simultaneous estimation of multi component containing
	formulations
MPC105.3	To learn chromatographic, fluorimetry, flame photometry
	techniques.
MPC105.1	To learn and understand mechanism of synthetic reactions.



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M.PHARMACY (PHARMACEUTICAL CHEMISTRY) 2 nd SEMESTER COURSEOUTCOMES	
Course Code: MPC201T	Course Name: Advanced Spectral Analysis
MPC201.1	To know the interpretation of the NMR, Mass and IR spectra of
	various organic compounds
MPC201.2	To learn theoretical and practical skills of the hyphenated
	instruments.
MPC201.3	To learn about the identification of organic compounds.
Course Code: MPC202T	Course Name: Advanced Organic Chemistry - II
MPC202.1	To learn the principles and applications of Green chemistry.
MPC202.2	To understand the concept of peptide chemistry.
MPC202.3	To apply the various catalysts used in organic reactions
MPC202.4	To understand the concept of stereochemistry and asymmetric synthesis.
Course Code: MPC203T	Course Name: Computer Aided Drug Design
MPC203.1	To understand the role of CADD in drug discovery.
MPC203.2	To learn different CADD techniques and their applications.
MPC203.3	To understand various strategies to design and develop new drug
	like molecules.
MPC203.4	To working with molecular modeling software to design new drug
	molecules.
Course Code: MPC204T	Course Name: Pharmaceutical Process Chemistry
MPC204.1	To apply the different strategies of scale up process of apis and
	intermediates.
MPC204.2	To understand the various unit operations and various reactions in
	process chemistry
Course Code: MPC205P	Course Name: Pharmaceutical Chemistry Practical
MPC205.1	To learn the synthesis of organic compounds by adapting different
	approaches
MPC205.2	To compare the study of synthesis of APIs/intermediates by different
2500000	synthetic routes
MPC205.3	To perform various assignments on regulatory requirements in API
MPC205.4	To learn the identification and interpretation of structure of organic
1500005.5	compounds by different techniques
MPC205.5	To understand the determination of purity by DSC in
	pharmaceuticals, perform the Microwave irradiated reactions of
MDC205 (synthetic importance.
MPC205.6	To learn determination of log P, MR, hydrogen bond donors and
	acceptors of selected drugs using Softwares, QSAR Studies,
	ADMET properties, Pharmacophore modeling, Docking studies etc.

M.PHARMACY (PHARMACEUTICAL CHEMISTRY) 3 rd SEMESTER COURSEOUTCOMES		
Course Code: MPC301T	Course Name: Research Methodology & Biostatistics	
MPC301.1	To learn about various aspects of research.	
MPC301.2	To apply the biostatistics in research.	
MPC301.3	To understand the CPCSEA guidelines to use animals.	
MPC301.4	To understand and apply the Declaration of Helsinki	