



JAYOTI VIDYAPEETH WOMEN'S UNIVERSITY, JAIPUR

ESTABLISHED BY GOVERNMENT OF RAJASTHAN

UGC APPROVED | NAAC ACCREDITED

DEPARTMENT OF PHARMACY FACULTY OF PHARMACEUTICAL SCIENCE

Course Outcomes of M. PHARM Pharmaceutics

Course code	Course Name	Course Outcomes
MPH101T	Modern Pharmaceutical Analytical Techniques	After completion of course student is able to know, 1. Chemicals and Excipients. 2. The analysis of various drugs in single and combination dosage forms. 3. Theoretical and practical skills of the instruments
MPH102T	Drug Delivery System	Upon completion of the course, student shall be able to understand 1. The various approaches for development of novel drug delivery systems. 2. The criteria for selection of drugs and polymers for the development of delivering system 3. The formulation and evaluation of Novel drug delivery systems.
MPH103T	Modern Pharmaceutics	Upon completion of the course, student shall be able to understand 1. The elements of preformulation studies. 2. The Active Pharmaceutical Ingredients and Generic drug Product development 3. Industrial Management and GMP Considerations. 4. Optimization Techniques
MPH104T	Regulatory Affair	Upon completion of the course, student shall be able to understand 1. The Concepts of innovator and generic drugs, drug development process 2. The Regulatory guidance and guidelines for filing and approval process 3. Preparation of Dossiers and their submission to regulatory agencies in different countries 4. Post approval regulatory requirements for actives and drug products 5. Clinical trials requirements for approvals for conducting clinical trials

		6. Pharmacovigilance and process of monitoring in clinical trials.
MPH105P	Pharmaceutics Practical I	
MPH201T	Molecular Pharmaceutics (Nano Tech and Targeted DDS)	<p>Upon completion of the course, student shall be able to understand</p> <ol style="list-style-type: none"> 1. The various approaches for development of novel drug delivery systems. 2. The criteria for selection of drugs and polymers for the development of NTDS 3. The formulation and evaluation of novel drug delivery systems.
MPH202T	Advanced Biopharmaceutics & Pharmacokinetics	<p>Upon completion of the course, student shall be able to understand</p> <ol style="list-style-type: none"> 1. The basic concepts in biopharmaceutics and pharmacokinetics. 2. The use raw data and derive the pharmacokinetic models and parameters the best describe→ the process of drug absorption, distribution, metabolism and elimination. 3. The critical evaluation of biopharmaceutic studies involving drug product equivalency. 4. The design and evaluation of dosage regimens of the drugs using pharmacokinetic and biopharmaceutic parameters. 5. The potential clinical pharmacokinetic problems and application of basics of pharmacokinetic
MPH203T	Computer Aided Drug Delivery System	<p>Upon completion of the course, student shall be able to understand</p> <ol style="list-style-type: none"> 1. History of Computers in Pharmaceutical Research and Development 2. Computational Modeling of Drug Disposition 3. Computers in Preclinical Development 4. Optimization Techniques in Pharmaceutical Formulation 5. Computers in Market Analysis 6. Computers in Clinical Development 7. Artificial Intelligence (AI) and Robotics 8. Computational fluid dynamics(CFD)
MPH204T	Cosmetic and Cosmeceuticals	<p>Upon completion of the course, student shall be able to understand</p> <ol style="list-style-type: none"> 1. Key ingredients used in cosmetics and cosmeceuticals. 2. Key building blocks for various formulations. 3. Current technologies in the market 4. Various key ingredients and basic science to develop cosmetics and cosmeceuticals 5. Scientific knowledge to develop cosmetics and cosmeceuticals with desired Safety, stability, and efficacy.
MPH205P	Pharmaceutics Practical II	

Pharmacology

Course code	Course Name	Course Outcomes
MPC101T	Modern Pharmaceutical Analytical Techniques	After completion of course student is able to know about chemicals and excipients. The analysis of various drugs in single and combination dosage forms. Theoretical and practical skills of the instruments
MPC102T	Advanced Organic Chemistry -I	Upon completion of the course the students shall be able to: 1. Discuss the pathophysiology and pharmacotherapy of certain diseases 2. Explain the mechanism of drug actions at cellular and molecular level 3. Understand the adverse effects and contraindications 4. Understand clinical uses of drugs used in treatment of diseases -
MPL10 3T	Pharmacological and Toxicological Screening Methods-I	Upon completion of the course the student shall be able to, 1. Appraise the regulations and ethical requirement for the usage of experimental animals. 2. Describe the various animals used in the drug discovery process and good laboratory practices in maintenance and handling of experimental animals 3. Describe the various newer screening methods involved in the drug discovery process 4. Appreciate and correlate the preclinical data to humans
MPL10 4T	Cellular and Molecular Pharmacology	Upon completion of the course, the student shall be able to, 1. Explain the receptor signal transduction processes. 2. Explain the molecular pathways affected by drugs. 3. Appreciate the applicability of molecular pharmacology and biomarkers in drugdiscovery process. 4. Demonstrate molecular biology techniques as applicable for pharmacology
MPL20 1T	Advanced Pharmacology II	Upon completion of the course the student shall be able to 1. Explain the mechanism of drug actions at cellular and molecular level 2. Discuss the Pathophysiology and pharmacotherapy of certain diseases 3. Understand the adverse effects, contraindications and clinical uses of drugs used in treatment of diseases
MPL10 2T	Pharmacological and Toxicological Screening Methods-II	Upon completion of the course the student shall be able to: 1. Explain the mechanism of drug actions at cellular and molecular level 2. Discuss the Pathophysiology and pharmacotherapy of certain diseases 3. Understand the adverse effects, contraindications and clinical uses of drugs used in treatment of diseases

MPL20 3T	Principles of Drug Discovery	Upon completion of this course, the student should be able to <ol style="list-style-type: none"> 1. Explain the various stages of drug discovery. 2. Appreciate the importance of the role of genomics, proteomics and bioinformatics in drug discovery. 3. Explain various targets for drug discovery. 4. Explain various lead seeking method and lead optimization.
MPL20 4T	Clinical research and pharmacovigilance	Upon completion of the course, the student shall be able to <ol style="list-style-type: none"> 1. Explain the regulatory requirements for conducting clinical trial. 2. Demonstrate the types of clinical trial designs. 3. Explain the responsibilities of key players involved in clinical trials. 4. Execute safety monitoring, reporting and closeout activities. 5. Explain the principles of Pharmacovigilance. 6. Detect new adverse drug reactions and their assessment.
MPL20 5P	Experimental Pharmacology - II	
MRM301T	Research Methodology & Biostatistics*	
	Journal Club	
	Discussion / Presentation (Proposal Presentation)	
	Research Work	
	Journal Club	
	Research Work	
	Discussion/Final Presentation	
	Co-curricular Activities	