

**SRI AUROBINDO INSTITUTE OF PHARMACY, INDORE (M.P.)**

**COURSE OUTCOME**

**M.PHARM (PHARMACEUTICS)**

| <b>M. PHARMACY (PHARMACEUTICS) I SEMESTER</b>                               |   |
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| <b>COURSE NAME &amp; CODE</b>   | <b>COURSE OUTCOME (COs)</b>   |
| <b>MPH 101T<br/>MODERN<br/>PHARMACEUTICAL<br/>ANALYTICAL<br/>TECHNIQUES</b> | CO1. Knowledge of Chemicals and Excipients.   |
|   | CO2. The analysis of various drugs in single and combination dosage forms.                      |
|   | CO3. Theoretical and practical skills of the instruments.                                       |
| <b>MPH 102T<br/>DRUG DELIVERY<br/>SYSTEMS</b>                               | CO1. The various approaches for development of novel drug delivery systems.                     |
|   | CO2. The criteria for selection of drugs and polymers for the development of delivering system  |
|   | CO3. The formulation and evaluation of Novel drug delivery systems.                             |
| <b>MPH 103T<br/>MODERN<br/>PHARMACEUTICS</b>                                | CO1. The elements of preformulation studies.  |
|   | CO2. The Active Pharmaceutical Ingredients and Generic drug Product development                 |
|   | CO3. Industrial Management and GMP Considerations.  |
| <b>MPH 104T<br/>REGULATORY AFFAIRS</b>                                      | CO1. The Concepts of innovator and generic drugs, drug development process                      |
|   | CO2. The Regulatory guidance's and guidelines for filing and approval process                   |
|   | CO3. Preparation of Dossiers and their submission to regulatory agencies in different countries |
|   | PCO4. Most approval regulatory requirements for actives and drug products                       |

| <b>M. PHARMACY (PHARMACEUTICS) II SEMESTER</b>  |  |
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| <b>COURSE NAME &amp; CODE</b>   | <b>COURSE OUTCOME (COs)</b>  |
| <b>MPH 201T<br/>MOLECULAR<br/>PHARMACEUTICS (NANO<br/>TECHNOLOGY &amp;<br/>TARGETED DDS) (NTDS)</b> | CO1. The various approaches for development of novel drug delivery systems.  |
|   | CO2. The criteria for selection of drugs and polymers for the development of NTDS  |
|   | CO3. The formulation and evaluation of novel drug delivery systems   |
| <b>MPH 202T<br/>ADVANCED<br/>BIOPHARMACEUTICS &amp;<br/>PHARMACOKINETICS</b>                        | CO1. The basic concepts in biopharmaceutics and pharmacokinetics.  |
|   | CO2. The use raw data and derive the pharmacokinetic models and parameters the best describe the process of drug absorption, distribution, metabolism and elimination. |
|   | CO3. The critical evaluation of biopharmaceutic studies involving drug product equivalency.  |
|   | CO4. The design and evaluation of dosage regimens of the drugs using pharmacokinetic and biopharmaceutic parameters.   |
|   | CO5. The potential clinical pharmacokinetic problems and application of basics of pharmacokinetic  |
| <b>MPH 203T<br/>COMPUTER AIDED DRUG<br/>DEVELOPMENT</b>   | CO1. History of Computers in Pharmaceutical Research and Development   |
|   | CO2. Computational Modeling of Drug Disposition  |
|   | CO3. Computers in Preclinical Development and Computers in Market Analysis   |
|   | CO4. Optimization Techniques in Pharmaceutical Formulation   |

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|  | CO5. Artificial Intelligence (AI) and Robotics  |
|  | CO6. Computational fluid dynamics(CFD)  |
| <b>MPH 204T<br/>COSMETICS AND<br/>COSMECEUTICALS</b> | CO1. Key ingredients used in cosmetics and cosmeceuticals.  |
|  | CO2. Key building blocks for various formulations.  |
|  | CO3. Current technologies in the market   |
|  | CO4. Various key ingredients and basic science to develop cosmetics and cosmeceuticals                          |
|  | CO5. Scientific knowledge to develop cosmetics and cosmeceuticals with desired Safety, stability, and efficacy. |

| <b>M. PHARMACY (PHARMACEUTICS) III SEMESTER</b>                   |  |
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| <b>COURSE NAME &amp; CODE</b>                                     | <b>COURSE OUTCOME (COs)</b>  |
| <b>MRM 301T<br/>RESEARCH<br/>METHODOLOGY &amp;<br/>BIOSTATICS</b> | CO1. Know the operation of M.S. Excel, SPSS, EPIINFO and SAS.              |
|   | CO2. Know the various statistical techniques to solve statistical problems |
|   | CO3. Appreciate statistical techniques in solving the problems.            |