



SRI SIVANI COLLEGE OF PHARMACY

(Under the Management of Sri Sivani Educational Society, Srikakulam)
 (Estd.2007, Approved by PCI-New Delhi and Affiliated to JNTU, Gurajada-Vizianagaram)
 N.H-16, Chilakapalem Jn., Etcherla Mandal, Srikakulam Dist - 532402.

COURSE OUTCOME STATEMENT

Course Outcomes: Course Outcomes are narrower statements that describe what students are expected to know, and be able to do at the end of each course. These relate to the skills, knowledge, and behaviour that students acquire in their enrolment through the course.

M.PHARM (PHARMACEUTICAL ANALYSIS)	
Course Outcome Code	Course Outcome Statements
MPA101T.1	The students will also be in a position to apply their knowledge in Pharmaceutical Analysis
MPA101T.2	The analysis of various drugs in single and combination dosage forms
MPA101T.3	Theoretical and Practical skills of the instrument
MPA101T.4	Apply the Skill in developing the new analytical methods for the validation Procedure
MPA102T.1	Appropriate analytical skills required for the analytical method development.
MPA102T.2	Principles of various reagents used in functional group analysis that renders necessary support in research methodology and demonstrates its application in the practical related problems
MPA102T.3	Analysis of impurities in drugs, residual solvents and stability studies of drugs and biological products
MPA102T.4	To provide students with a foundation in immunological processes
MPA103T.1	Explain the aspect of Validation
MPA103T.2	Carryout validation of manufacturing processes
MPA103T.3	Apply the Knowledge of validation to instruments and equipments
MPA103T.4	Validate the manufacturing Facilities
MPA104T.1	Discuss about types and properties of carbohydrates, proteins, lipids, vitamins, food additives, pigments, finished food products and pesticides
MPA104T.2	Describe general methods of analysis of carbohydrates, proteins, lipids, vitamins, food additives, pigments, finished food products and pesticides
MPA104T.3	Explain various analytical techniques in the determination of carbohydrates, proteins, lipids, vitamins, food additives, pigments, finished food products and pesticides
MPA104T.4	Elaborate on different food regulations and legislations
MPA105PA.1	Calibration of volumetric apparatus

MPA105PA.2	Calibration of Analytical Instruments
MPA105PA.3	Analysis of official compounds by using various volumetric methods
MPA105PA.4	Analysis of official compounds by instrumental techniques
MPA105PB.1	Analysis of Pharmacopoeial compounds and their formulation by UV-Visible spectrophotometry.
MPA105PB.2	Simultaneous estimation of multi component containing formulation by UV spectrophotometry
MPA105PB.3	Qualitative and Quantitative analysis of Fats and oils.
MPA105PB.4	Quality control test for Milk and Milk Product
MPA106S.1	Apply advanced cognitive skills to gather information through literature review and experiments.
MPA106S.2	Showcase comprehension and adherence to ethical principles and regulations set by regulatory bodies and government authorities.
MPA106S.3	Demonstrate self-management, teamwork, unbiased decision-making, and foster learning for themselves and others.
MPA106S.4	Utilize suitable techniques and computer tools, considering practical uses and enhancing their technical proficiency.
MPA201T.1	The students will also be in a position to apply their knowledge in Pharmaceutical Analysis
MPA201T.2	The analysis of various drugs in single and combination dosage forms
MPA201T.3	Theoretical and Practical skills of the instrument
MPA201T.4	Apply the Skill in developing the new analytical methods for the validation Procedure
MPA202T.1	Appropriate analytical skills required for the analytical method development
MPA202T.2	Principles of various reagents used in functional group analysis that renders necessary support in research methodology and demonstrates its application in the practical related problems
MPA202T.3	Analysis of impurities in drugs, residual solvents and stability studies of drugs and biological products
MPA202T.4	Guidelines for BA/BE studies
MPA203T.1	Understand the cGMP aspects in a Pharmaceutical Industry
MPA203T.2	Appreciate the importance of documentation
MPA203T.3	Understand the scope of quality certifications applicable to pharmaceutical industries
MPA203T.4	To understand the responsibilities of QA & QC
MPA204T.1	Explain herbal remedies, toxicity associated with herbal remedies and regulations and assessment of herbal drugs
MPA204T.2	Describe causes, measures and determination of adulteration and regulatory requirements for setting up of herbal drug industry
MPA204T.3	Explain effects of herbal remedies on clinical laboratory testing, monographs, herbal drug- drug interactions and challenges in safety monitoring of herbal drugs
MPA204T.4	Conduct evaluation of Cosmetic products and raw materials of cosmetics as per BSI standards
MPA205PA.1	Calibration of volumetric apparatus

MPA205PA.2	Calibration of Analytical Instruments
MPA205PA.3	Analysis of official compounds by using various volumetric methods
MPA205PA.4	Analysis of official compounds by instrumental techniques
MPA205PB.1	Analysis of Pharmacopoeial compounds and their formulation by UV-Visible spectrophotometry.
MPA205PB.2	Simultaneous estimation of multi component containing formulation by UV spectrophotometry.
MPA205PB.3	Qualitative and Quantitative analysis of Fats and oils.
MPA205PB.4	Quality control test for Milk and Milk Product
MPA206S.1	Apply advanced cognitive skills to gather information through literature review and experiments.
MPA206S.2	Showcase comprehension and adherence to ethical principles and regulations set by regulatory bodies and government authorities.
MPA206S.3	Demonstrate self-management, teamwork, unbiased decision-making, and foster learning for themselves and others.
MPA206S.4	Utilize suitable techniques and computer tools, considering practical uses and enhancing their technical proficiency.
MRM301T.1	Explain qualitative and quantitative aspects of clinical study design
MRM301T.2	Interpret Various Biostatistical methods in Modern Analytical & Bioanalytical Techniques
MRM301T.3	Describe various ethical guidelines for biomedical research.
MRM301T.4	Enumerate various CPCSEA guidelines for laboratory animal facility.
MRM302S.1	Understanding and debating current topics of active interest in their field
MRM302S.2	Apply skills to use search engines for selection of scientific articles of their interest
MRM302S.3	Analyze the critical thinking skills in appraisal of the scientific literature
MRM302S.4	Create a scientific report on the critically appraised article
MRM303S.1	Discuss the Good Laboratory practices followed in Pharmaceutical Industry
MRM303S.2	Extraction of drugs and analysis of biological sample.
MRM303S.3	Role of Advanced instrumentation in characterization of degradants and impurities
MRM303S.4	Good documentation practices followed in Pharmaceutical Industry
MRM304S.1	Demonstrate the UV absorption spectra of various functional groups by Woodward Fiesure rule
MRM304S.2	Demonstrate the extraction of drugs and metabolites from biological matrix Protein precipitation and Liquid -Liquid Extraction
MRM304S.3	Development of Stability indicating HPLC analytical method for drug substance
MRM304S.4	Characterization of unknown compounds using FTIR, NMR and Mass Spectrometry.
MRM401P.1	Understanding and debating current topics of active interest in their field
MRM401P.2	Apply skills to use search engines for selection of scientific articles of their interest

MRM401P.3	Analyze the critical thinking skills in appraisal of the scientific literature
MRM401P.4	Create a scientific report on the critically appraised article
MRM403P.1	Discuss the Good Laboratory practices followed in Pharmaceutical Industry
MRM403P.2	Extraction of drugs and analysis of biological sample.
MRM403P.3	Role of Advanced instrumentation in characterization of degradants and impurities
MRM403P.4	Good documentation practices followed in Pharmaceutical Industry
MRM404P.1	Demonstrate the UV absorption spectra of various functional groups by Woodward Fiesure rule
MRM404P.2	Demonstrate the extraction of drugs and metabolites from biological matrix Protein precipitation and Liquid -Liquid Extraction
MRM404P.3	Demonstration and Analysis of pesticide residues on food products
MRM404P.4	Development of Stability indicating HPLC analytical method for drug substance