



GAUTAM COLLEGE OF PHARMACY HAMIRPUR (H.P)

(Approved by PCI - New Delhi & Himachal Government)
Affiliated to Himachal Pradesh Technical University, Hamirpur & Himachal Pradesh Technical Shiksha Board, Dharamshala

M. Pharm (Pharmaceutical Chemistry)

PO-1 Pharmacy Knowledge: Apply comprehensive knowledge and skills associated with pharmaceutical chemistry in design and development of new drug like molecules for biological targets.

PO-2 Planning abilities: Identify, formulate and test research problems, analyse, interpret and draw conclusions from data; plan, execute and report the results of an experiment or investigation effectively within time frame.

PO-3 Problem analysis: Demonstrate efficiency in problem solving skills, based on scientific and analytical approach. Analysis and solving problem related to synthesis, purification, physicochemical properties and toxicity of designed compounds.

PO-4 Modern tool usage: Acquire and apply latest scientific methods and computing tools related to synthesis, analysis and characterization of compounds with thorough understanding of limitations.

PO-5 Leadership skills: Demonstrate capability to build and lead team that can help to achieve the vision, inspire and motivate team members to engage with that vision and use leadership skills to guide the team for fulfilment of professional and societal responsibilities.

PO-6 Professional identity: Demonstrate attitude, values, knowledge and skills that are keys to fulfil professional competence. Understand analyse and communicate the value of their professional role in society as health care professionals.

PO-7 Pharmaceutical ethics: Apply ethical principals while making decisions and take responsibility for outcome associated with the decisions. Demonstrate behaviour that respects cultural and personal variability in values, communication and lifestyles.

PO-8 Communication: Communicate effectively with scientific community and with society at large, in writing and orally; express views, thoughts and ideas in a clear and concise manner. Write scientific reports, create effectual presentations and documentation and provide and obtain clear instructions.

PO-9 The Pharmacist and society: Demonstrate responsible behaviour and ability to assess community, health, safety and legal issues and consequent responsibilities relevant to professional practice.

PO-10 Environment and sustainability: Understand the effect of chemicals and materials used in pharmaceutical chemistry on environment, apply contextual knowledge to minimise negative impact on environment and provide sustainable solutions.

PO-11 Life-long learning: Promote lifelong learning activities through self motivation focussed at personal and professional development; to fulfil these needs attend and participate in scientific seminars / conferences / workshop on an ongoing basis.



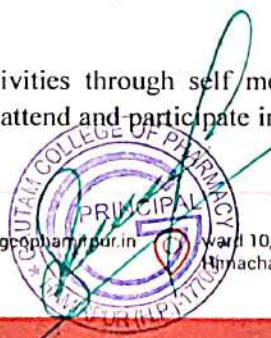
01972-292018
+91 9418010420



collegepharmacy536@gmail.com
ggchmr@gmail.com



www.gcopharmipur.in



ward 10, Ram Nagar, Hamirpur,
Himachal Pradesh 177001



GAUTAM COLLEGE OF PHARMACY HAMIRPUR (H.P.)

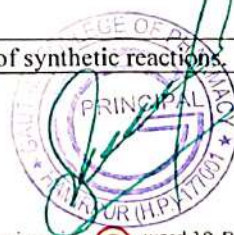
(Approved by PCI - New Delhi & Himachal Government)

Affiliated to Himachal Pradesh Technical University, Hamirpur & Himachal Pradesh Technical Shiksha Board, Dharamshala

M.PHARMACY (PHARMACEUTICAL CHEMISTRY)

1st SEMESTER COURSEOUTCOMES

Course Code: MPC101T	Course Name: Modern Pharmaceutical Analytical Techniques
CO1	To know about chemicals and excipients.
CO2	To know the analysis of various drugs in single and combination dosage forms.
CO3	To learn theoretical and practical skills of the instruments..
Course Code: MPC102T	Course Name: Advanced Organic Chemistry - I
CO1	To learn the principles and applications of retrosynthesis
CO2	To know the mechanism & applications of various named reactions
CO3	To understand the concept of disconnection to develop synthetic routes for small target molecule.
CO4	To explain various catalysts used in organic reactions.
CO5	To gain the knowledge of the chemistry of heterocyclic compounds.
Course Code: MPC103T	Course Name: Advanced Medicinal Chemistry
CO1	To understand the different stages of drug discovery.
CO2	To explain the role of medicinal chemistry in drug research.
CO3	To learn different techniques for drug discovery.
CO4	To apply various strategies to design and develop new drug like molecules for biological targets.
CO5	To learn about peptidomimetics.
Course Code: MPC104T	Course Name: Pharmaceutical Inorganic Chemistry (Theory)
CO1	To learn different types of natural compounds and their chemistry and medicinal importance.
CO2	To gain knowledge about the importance of natural compounds as lead molecules for new drug discovery.
CO3	To understand the concept of rDNA technology tool for new drug discovery.
CO4	To apply the general methods of structural elucidation of compounds of natural origin
CO5	To perform isolation, purification and characterization of simple chemical constituents from natural source.
Course Code: MPC105P	Course Name: Pharmaceutical Chemistry Practical - I
CO1	To learn analysis of Pharmacopoeial compounds and their formulations.
CO2	To apply simultaneous estimation of multi component containing formulations
CO3	To learn chromatographic, fluorimetry, flame photometry techniques.
CO4	To learn and understand mechanism of synthetic reactions.



01972-292018
+91 9418010420



collegepharmacy536@gmail.com
ggchmr@gmail.com



www.gcophamirpur.in



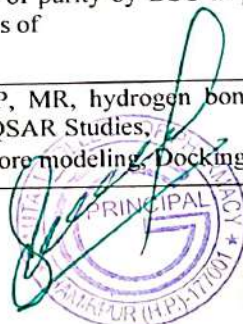
ward 10, Ram Nagar, Hamirpur,
Himachal Pradesh 177001



GAUTAM COLLEGE OF PHARMACY HAMIRPUR (H.P)

(Approved by PCI - New Delhi & Himachal Government)
Affiliated to Himachal Pradesh Technical University, Hamirpur & Himachal Pradesh Technical Education Board, Dharamshala

M.PHARMACY (PHARMACEUTICAL CHEMISTRY) 2nd SEMESTER COURSE OUTCOMES	
Course Code: MPC201T	Course Name: Advanced Spectral Analysis
CO1	To know the interpretation of the NMR, Mass and IR spectra of various organic compounds
CO2	To learn theoretical and practical skills of the hyphenated instruments.
CO3	To learn about the identification of organic compounds.
Course Code: MPC202T	Course Name: Advanced Organic Chemistry - II
CO1	To learn the principles and applications of Green chemistry.
CO2	To understand the concept of peptide chemistry.
CO3	To apply the various catalysts used in organic reactions
CO4	To understand the concept of stereochemistry and asymmetric synthesis.
Course Code: MPC203T	Course Name: Computer Aided Drug Design
CO1	To understand the role of CADD in drug discovery.
CO2	To learn different CADD techniques and their applications.
CO3	To understand various strategies to design and develop new drug like molecules.
CO4	To working with molecular modeling software to design new drug molecules.
Course Code: MPC204T	Course Name: Pharmaceutical Process Chemistry
CO1	To apply the different strategies of scale up process of APIs and intermediates.
CO2	To understand the various unit operations and various reactions in process chemistry
Course Code: MPC205P	Course Name: Pharmaceutical Chemistry Practical
CO1	To learn the synthesis of organic compounds by adapting different approaches
CO2	To compare the study of synthesis of APIs/intermediates by different synthetic routes
CO3	To perform various assignments on regulatory requirements in API
CO4	To learn the identification and interpretation of structure of organic compounds by different techniques
CO5	To understand the determination of purity by DSC in pharmaceuticals, perform the Microwave irradiated reactions of synthetic importance.
CO6	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.



01972-292018
+91 9418010420



collegepharmacy536@gmail.com
ggchmr@gmail.com



www.gcophamirpur.in



ward 10, Ram Nagar, Hamirpur,
Himachal Pradesh 177001



GAUTAM COLLEGE OF PHARMACY HAMIRPUR (H.P.)

(Approved by PCI - New Delhi & Himachal Government)

Affiliated to Himachal Pradesh Technical University, Hamirpur & Himachal Pradesh Technical Shiksha Board, Dharamshala

M.PHARMACY (PHARMACEUTICAL CHEMISTRY) 3rd SEMESTER COURSEOUTCOMES

Course Code: MPC301T	Course Name: Research Methodology & Biostatistics
CO1	To learn about various aspects of research.
CO2	To apply the biostatistics in research.
CO3	To understand the CPCSEA guidelines to use animals.
CO4	To understand and apply the Declaration of Helsinki



01972-292018
+91 9418010420



collegepharmacy536@gmail.com
ggchmr@gmail.com



www.gcophamirpur.in



ward 10, Ram Nagar, Hamirpur,
Himachal Pradesh 177001