

MCP Curriculum Requirements

YEAR 1

During the first year, students in the MCP program must take four (4) core courses and at least two (2) elective courses from the list below. Elective courses not on the below list must be approved by the Graduate Advisor and may require a Graduate Division General Petition.

Required Courses

PHARM 254 – Introduction to Pharmacology

PHRMSCI 223 – Biological Macromolecules

PHRMSCI 250A/B/C – Current Topics in Pharmaceutical Sciences

PHRMSCI 277 – Medicinal Chemistry

PHRMSCI 280 – Lab Rotation/Research (or equivalent in the respective faculty's department – CHEM, PHARM, or MB&B)

PHRMSCI 298 – Research Seminar

Elective Courses (select at least two)

Chemistry Department

CHEM 201 – Organic Reaction Mechanisms

CHEM 202 – Organic Reaction Mechanisms II

CHEM 203 – Organic Spectroscopy

CHEM 204 – Organic Synthesis I

CHEM 205 – Organic Synthesis II

CHEM 218 – Metallobiochemistry

CHEM 219 – Chemical Biology

CHEM 221A – Fundamentals of Molecular Biophysics

Molecular Biology & Biochemistry Department

MOLBIO 203 – Nucleic Acid Structure & Function

MOLBIO 204 – Protein Structure & Function

MOLBIO 206 – Regulation of Gene Expression

MOLBIO 211 – Biomolecular Structure Methods

BIOCHEM 212 – Signal Transduction & Growth Control

Pharmaceutical Sciences Department

PHRMSCI 274 – Nanomedicine

PHRMSCI 263 – Pharmacogenomics and Epigenetics

PHRMSCI 275 – Discovery Computing Techniques

PHRMSCI 278 – Emerging Technologies in Pharmaceutical Sciences & Medicine

Pharmacology Department (can be substituted for the PHARM 254 requirement)

PHARM 252 – Neurotransmitter and Drug Receptors

PHARM 255 – Chemical Transmission

MCP Curriculum Requirements Cont.

Additional Courses

PHARM 257 – Ethics in Research or equivalent (Responsible Conduct of Research training – [UC Learning Center](#) online modules – once completed, send the SAO the certificate of completion)

PHRMSCI 399 – University Teaching (or equivalent in the respective department for which you are TAing) – You must enroll in the course every quarter you are employed as a TA.

Advancement Exam

Completion of the PHRMSCI 250A/B/C course series, including the final paper, fulfills your advancement examination requirement.

Sample Study List

	Fall	Winter	Spring
CORE	PHRMSCI 223 PHRMSCI 250A PHARM 254 PHRMSCI 298 PHRMSCI 280	PHRMSCI 277 PHRMSCI 250B PHRMSCI 298 PHRMSCI 280	PHRMSCI 250C PHRMSCI 298 PHRMSCI 280 PHRMSCI 399
PHARMSCI Electives	PHRMSCI 274	PHRMSCI 263 PHRMSCI 275	PHRMSCI 278
CHEM Electives	CHEM 201	CHEM 203 CHEM 204 CHEM 219	CHEM 202 CHEM 205 CHEM 218 CHEM 221A
MB&B Electives	MOLBIO 211 MOLBIO 204	MOLBIO 203	
PHAR Electives		PHARM 252	PHARM 255

You must transfer to a home department by the end of Spring Quarter and completed the following forms:

- [Department/Research Advisor Choice Form](#)
- [Change of Major](#)

YEARS 2-5

See the handbook for the PhD program into which you are transferring for degree requirements beyond the first year.