Division of Medicinal Chemistry and Pharmacognosy
College of Pharmacy, The Ohio State University

Computational MedChem Track
Graduate Course Requirements

(updated 08/02/18)

Biochemistry

BIOCHEM 6761 - Advanced Biochemistry: Macromolecular Structure and Function (3 credits)

Chemistry

CHEM 7470 - Computational Chemistry (1.5 credits)

Medicinal Chemistry

PHR 7350 - Drug Discovery and Drug Design (2 credits)
PHR 8380 - Advanced Medicinal Chemistry: Structure-based Computer-aided Molecular Design (2 credits)

Three electives from the following courses

CSE 5241 - Introduction to Database Systems (2 credits)
CSE 5243 - Introduction to Data Mining (3 credits)
CSE 5361 - Numerical Methods (3 credits)
CSE 5441 - Introduction to Parallel Computing (3 credits)
CSE 5523 - Machine Learning and Statistical Pattern Recognition (3 credits)
BMI 5730 - Introduction to Bioinformatics (3 credits)
BMI 5770 - Health Analytics: Data to Discovery to Dissemination (3 credits)
BIOCHEM 5621 - Biochemistry and Molecular Biology Lab (4 credits)
PHR 7351 – Special Topics in Medicinal Chemistry (2 credits)
PHR 8320 - Biomedicinal Chemistry for Graduate Students (5 credits)
PHR 8390 - Recent Advances in Pharmacognosy (2 credits)
PHR 8510 - Advanced Pharmacognosy (2 credits)
PHR 8700 - Theoretical and Experimental Pharmacology (2 credits)
BIOCHEM 6701 - Advanced Biochemistry: Molecular Biology (3 credits)
CHEM 7550 - Statistical Thermodynamics (3 credits)
CHEM 7590 - Molecular Simulation of Materials (3 credits)
Other courses with approval of advisor and advisory committee

Note: The courses listed above are in addition to the course requirements common to all graduate students in the Division of Medicinal Chemistry and Pharmacognosy, namely PHR 8520 (Research Ethics) and PHR 8880/8881 (College and Division Seminars). One enrollment in 8880 or 8881 is required per semester while on campus (with three 8880.01 or 8881.01 enrollments prior to graduation).