

CHEMISTRY B.S. - PHARMACOLOGY

Bachelor of Science - Chemistry; Pharmacology Concentration

College of Humanities & Sciences

Degree Specific Credits: 87

Required Cumulative GPA: 2.0

Catalog Year: 2018-2019

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Code	Title	Hours
Lower-Division Core Courses		46
	General Chemistry	
	Organic Chemistry	
	Biochemistry and Biology	
	Physics	
	Mathematics	
Upper-Division Core Courses		35
	Analytical Chemistry	
	Physical Chemistry	
	Inorganic Chemistry	
	Biochemistry	
	Pharmacology	
	Biology	
	Advanced Electives	3
	Ethics	3
Total Hours		87

Lower-Division Core Courses

General Chemistry

Code	Title	Hours
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

Organic Chemistry

Code	Title	Hours
Complete all of the following courses:		
CHMY 221	Organic Chemistry I	3

CHMY 222	Organic Chemistry I Lab	2
CHMY 223	Organic Chemistry II	3
CHMY 224	Organic Chemistry II Lab	2
Total Hours		10

Minimum Required Grade: C-

Biochemistry and Biology

Code	Title	Hours
Complete all of the following courses:		
BCH 110	Intro Biology for Biochemists	3
BCH 111	Intro Biol for Biochemists Lab	1
BIOB 260	Cellular and Molecular Biology	4
Total Hours		8

Minimum Required Grade: C-

Physics

Code	Title	Hours
Complete all of the following courses:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	5
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	5
Total Hours		10

Minimum Required Grade: C-

Mathematics

Code	Title	Hours
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: All courses in all subcategories listed are required.

Analytical Chemistry

Code	Title	Hours
Complete all of the following courses:		
CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Physical Chemistry

Code	Title	Hours
Complete the following course:		
CHMY 373	Phys Chem-Kntcs & Thrmodynms	4
Total Hours		4

Minimum Required Grade: C-

Inorganic Chemistry

Code	Title	Hours
Complete the following course:		
CHMY 401	Advanced Inorganic Chemistry	3
Total Hours		3

Minimum Required Grade: C-

Biochemistry

Code	Title	Hours
Complete all of the following courses:		
BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
Total Hours		6

Minimum Required Grade: C-

Pharmacology

Code	Title	Hours
Complete all of the following courses:		
PHAR 421	Medicinal Chem I	3
PHAR 422	Medicinal Chem II	3
PHAR 443	Pharmacol & Toxicol I	4
PHAR 444	Pharmacology & Toxicol II	4
Total Hours		14

Minimum Required Grade: C-

Advanced Electives

Note: 3 credits maximum of CHMY 492 may be applied toward degree requirements. 3 credits maximum of BIOB 490 may be applied toward degree requirements.

Code	Title	Hours
Complete 3 credits from the following courses:		
BIOB 490	Adv Undergrad Research	3
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	
CHMY 402	Advanced Inorganic Chem Lab	
CHMY 403	Descriptive Inorganic Chem	
CHMY 442	Aquatic Chemistry	
CHMY 465	Organic Spectroscopy	
CHMY 466	FT-NMR Optn for Undrgrd Rsrch	
CHMY 492	Independent Study	
Total Hours		3

Minimum Required Grade: C-

Ethics

Code	Title	Hours
Complete the following course:		
CHMY 305E	Ethics, Literature and Writing in the Sciences	3
Total Hours		3

Minimum Required Grade: C-