

B.S. Medicinal Chemistry Degree

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes.

First Year

Fall

Course	Credit
CH 1130 PFDC 1: Orientation	1
CH 1150 University Chemistry I AND	3
CH 1151 University Chemistry Lab 1 AND	1
CH 1153 University Chemistry I Recitation	1
PH 1100 Physics by Inquiry I	1
MA 1160 Calculus with Technology I	4
UN 1015 Composition (OR UN 1025 Global Issues)	3
Total	14

Spring

Course	Credit
CH 1160 University Chemistry II AND	3
CH 1161 University Chemistry Lab II. AND	1
CH 1163 University Chemistry II Recitation	1
PH 2100 University Physics I	3
MA 2160 Calculus with Technology II	4
UN 1025 Global Issues (OR UN 1015 Composition)	3
Total	15

Second Year

Fall

Course	Credit
CH 2130 PDFC 2: Career Planning	2
CH 2430 Mechanistic Organic Chemistry	3
CH 2411 Organic Chemistry Lab I	1
BL 1400 Principles of Biology and BL 1410 Principles of Biology Lab	4
PH 1200 Physics by Inquiry II	1
PH 2200 University Physics II – E & M	3
General Education Goal 4: Critical & Creative Thinking (or Goal 8)	3
Total	17

Spring

Course	Credit
CH 2440 Synthetic Organic Chemistry	3
CH 2421 Organic Chemistry Lab II	2
MA 3160 Multivariable Calculus with Technology	4
MA 2320 Elementary Linear Algebra	2
General Education Goal 8: Social Responsibility & Ethical Reasoning (or Goal 4)	3
Total	14

Third Year

Fall

Course	Credit
CH 3510 Physical Chemistry I	3
CH 3511 Physical Chemistry Lab I	2
CH 4710 Biomolecular Chemistry	3
CH 4220 Bioanalytical Chemistry	3
CH 4221 Bioanalytical Chemistry Lab	2
General Education HASS Distribution	3
Total	16

Spring

Course	Credit
CH 3130 PDFC 3: Communication	1
CH 3540 Biophysical Chemistry OR CH 3520 Physical Chemistry II	3
CH 3541 Biophysical Chemistry Lab OR CH 3521 Physical Chemistry II Lab	2
CH 4720 Biomolecular Chemistry II	3
CH 4721 Research Methods in Biomolecular Chemistry	3
General Education HASS Distribution	3
Total	18

Fourth Year

Fall

Course	Credit
CH 4120 Medicinal Chemistry: Drug Design	3
MA 2720 Statistical Methods	4
* Major Approved Electives	3
General Education HASS Distribution	3
Free Electives	3
Total	16

Spring

Course	Credit
CH 4130 PDFC 4: Senior Seminar	2
CH 4412 Spectroscopy of Organic Chemistry	3
CH 4110 Medicinal Chemistry: Mechanism of Drug Interaction	3
BL 4070 Environmental Toxicology	3
General Education HASS Distribution	3
Free Electives	4
Total	18

Grand Total = 128 Credits

NOTE: 3 Units of co-curricular activities are required (P.E. courses are taught in 0.5 unit classes. Thus, 6 of these are needed for 3 units). It is highly recommended that students take at least one P.E. class during each semester of their first year, if possible.