

Pre-Pharmacy, B.A. Degree in Chemistry with Emphasis in Biological Chemistry Minnesota State University Moorhead

<http://www.mnstate.edu/jasperse/PrePharmacy/Pharmacy.html>

The following is a sample schedule for both completing pre-pharmacy requirements while also satisfying the requirements to graduate with a B.A. Degree in Chemistry with Emphasis in Biological Chemistry.

- The schedule is sufficiently general to cover the requirements of most all pharmacy schools.
- Many of the science classes are offered only in the fall or the spring, and many of these need to be taken in correct sequence in order to satisfy prerequisites.
- Exceptional students might take the PCAT (pharmacy college admissions test) during/before their junior year, and might be able to be admitted into pharmacy school after their junior year.

FALL		FRESHMAN YEAR		DC
Biol	115	Organismal Biology (lab)	4	4IL
Chem	150	Gen Chem I (lab)	4	4IL
Engl	101	English Composition*	4	1B
CMST	100	Speech Communication*	3	1A
Hlth	122	Personal Health/Wellness	1	
Total Credits			16	

SPRING				DC
Biol	111	Cell Biology (lab)	4	
Chem	210	Gen Chem II	4	
Math	142	Precalculus ¹	4	3
Phil	110	Practical Reasoning*	3	2
Total Credits			15	

FALL		SOPHOMORE YEAR		
Chem	350	Organic Chem I	3	
Chem	355	Organic Chem Lab I	1	
Biol	323	Human Anatomy (lab)	4	
Phys	160	Physics I	4	4I
Electives			3	
Total Credits			15	

SPRING				
Chem	360	Organic Chem II	3	
Chem	365	Organic Chem Lab II	1	
Chem	380	Analytical Chem (lab)	4	
Phys	161	Physics II ²	4	
Electives			3	
Total Credits			15	

FALL		JUNIOR YEAR		
Biol	350	Microbiology (lab)	4	
Chem	400	Biochemistry I	3	
Chem	405	Biochemistry I Lab	1	
Chem	300	Inorganic Chem I	3	
Electives			3	
Total Credits			14	

SPRING				
Biol	349	Human Physiology (lab) ³	4	
Chem	410	Biochemistry II	3	
Chem	415	Biochemistry II Lab	1	
Math	261	Calculus I	4	3M
Electives			3	
Total Credits			15	

FALL		SENIOR YEAR		
Chem	450	Physical Chem I	3	
Chem	455	Physical Chem Lab I	1	
Biol	341	Genetics (lab)	4	
Math	262	Calculus II ⁴	4	
Total Credits			14	

SPRING				
Chem	498	Chemistry Seminar	1	
Engl	387	Tech Report Writing	4	
Electives			4	
Electives			3	
Total Credits			15	

¹ Mathematics placement exam is needed to inform whether a student should begin directly in calculus, precalculus, or college algebra.

² Physics II is required by UM but not by NDSU

³ Human Physiology is required by NDSU but not by UM

⁴ Calculus II is required by NDSU but not by UM