

# PHARMACY

**Advisors:** Edward McIntee

The College of Saint Benedict and Saint John's University offer a pre-professional program for students who plan to enter the field of pharmacy. Entrance requirements for pharmacy schools vary; students should inform themselves of the courses required by the school they plan to attend. A meeting with a pre-pharmacy advisor is suggested.

Admission to most colleges of pharmacy occurs when the student enters the professional program. This may occur after completion of pre-professional requirements or after completion of the bachelor's degree, generally with a major in biology, chemistry, biochemistry or natural science. Students are advised to consult with the faculty advisor early in their studies. It is recommended that students applying for pharmacy school apply via the early admissions process if available.

Pre-professional coursework requirements differ slightly, but the following list of courses is recommended based on the requirements of the College of Pharmacy, University of Minnesota for 2023:

Code	Title	Hours
BIOL 101	Foundations of Biology	4
BIOL 212 or BIOL 307	Microbiology Biology of Microorganisms	4
BIOL 325 & BIOL 326	Human Anatomy and Physiology I and Human Anatomy and Physiology II	8
One of the following: <sup>1</sup>		4
CHEM 315	Advanced Reactions (Reactivity 3)	
BIOL 201	Intermediate Cell Biology and Genetics	
BIOL 311	Cell Biology	
BIOL 316	General Genetics	
BIOL 317	Biochemistry	
BIOL 318	Molecular Genetics	
NUTR 330	Nutritional Biochemistry and Assessment (Macronutrients)	
MATH 119	Calculus I	4
One of the following:		
MATH 124	Probability and Statistical Inference	
MATH 345 & MATH 346	Mathematical Statistics I and Mathematical Statistics II	
Select four of the following with labs:		20
CHEM 125	Introduction to Chemical Structure and Properties	
CHEM 250	Reactions of Nucleophiles and Electrophiles (Reactivity 1)	
CHEM 251	Intermediate Reactions of Nucleophiles and Electrophiles (Reactivity 2)	
CHEM 255	Macroscopic Chemical Analysis	
CHEM 201	Purification and Separation Lab I	
CHEM 202	Purification and Chromatography Lab II	
CHEM 203	Synthesis Lab	
CHEM 205	Chemical Measurement Lab	
One of the following: <sup>2</sup>		4-8
PHYS 191	Foundations of Physics I	
PHYS 105 & PHYS 106	Physics for the Life Sciences I and Physics for the Life Sciences II	

Select two courses <sup>3</sup>		8
Social & Behavioral Sciences Recommended Courses <sup>4</sup>		
One of the following: <sup>4</sup>		4-8
ENGL 311	Creative Nonfiction	
One of the following: <sup>4</sup>		4
COMM 102	Public Speaking and the Public Sphere	
COMM 105	Introduction to Human Communication	
COMM 205	Interpersonal Communication	
COMM 265	Group Communication	
COMM 350	Intercultural Communication	

<sup>1</sup> Any other advanced biology course must focus on the human body in order to be considered.

<sup>2</sup> Physics, algebra, or calculus-based course

<sup>3</sup> Recommended courses: psychology, sociology, economics, global issues, political science, anthropology.

<sup>4</sup> This prerequisite is waived by U of MN if student has a U.S. bachelor's degree

Visit the prerequisites webpage <http://pharmacy.umn.edu/pharmd/admissions/prerequisites/index.htm> (<http://pharmacy.umn.edu/pharmd/admissions/prerequisites/>) for all information about University of Minnesota prerequisites.

## Additional Requirements:

### General Education Requirements:

All undergraduate students must complete the requirements of the Integrations Curriculum (IC) which is designed to ensure all of our students receive a liberal arts education. Please review details of the Integrations Curriculum (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/integrations-curriculum/>) requirements here (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/integrations-curriculum/>).

### Graduation Requirements:

In addition to the Integrations Curriculum, all undergraduate students must meet the following minimum degree requirements to earn their degree from CSB and SJU.

**Credits:** 124 total credits, 40 of which must be from upper division coursework

**GPA:** 2.0 or higher\*

**Residency:** At least 24 of your last 32 credits must be completed at CSB/SJU

Please visit Graduation (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/graduation/>) under the Academic Policies and Regulations (<https://catalog.csbsju.edu/catalog/academic-programs-policies-regulations/>) portion of the catalog for additional details regarding degree requirements.

\* Cumulative GPA as well as major(s)/minor(s) GPA. Please note some majors/minors may require a higher GPA to earn their degree.

## Four Year Plans

### Pre-Pharmacy

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
INTG 105	College Success	1
INTG 100	Foundations	4
Language 111		4
BIOL 101	Foundations of Biology	4
CHEM 125	Introduction to Chemical Structure and Properties	4
CHEM 201	Purification and Separation Lab I	1
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
Language 112		4
Cultural/Social Difference - Identity		4
BIOL 201	Intermediate Cell Biology and Genetics	4
CHEM 250	Reactions of Nucleophiles and Electrophiles (Reactivity 1)	4
CHEM 202	Purification and Chromatography Lab II	1
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
Language 211		4
THEO 100	Theological Explorations	4
PHYS 105	Physics for the Life Sciences I	4
CHEM 251	Intermediate Reactions of Nucleophiles and Electrophiles (Reactivity 2)	4
CHEM 203	Synthesis Lab	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
CHEM 255	Macroscopic Chemical Analysis	4
CHEM 205	Chemical Measurement Lab	1
PHYS 106	Physics for the Life Sciences II	4
MATH 124	Probability and Statistical Inference	4
Social World		4
<b>Hours</b>		<b>17</b>
<b>Third Year</b>		
<b>Fall</b>		
BIOL 307	Biology of Microorganisms	4
BIOL 325	Human Anatomy and Physiology I	4
Artistic Expression		4
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
BIOL 326	Human Anatomy and Physiology II	4
MATH 119	Calculus I	4
Human Experience		4
<b>Hours</b>		<b>12</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Theological Integrations		4
COMM		4
Cultural/Social Difference - Systems		4
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
INTG 300	Learning Integrations	4
ENGL 311	Creative Nonfiction	4
<b>Hours</b>		<b>8</b>
<b>Total Hours</b>		<b>113</b>

### Pre-Pharmacy with Study Abroad

Course	Title	Hours
<b>First Year</b>		
<b>Fall</b>		
INTG 105	College Success	1
INTG 100	Foundations	4
Language 111		4
BIOL 101	Foundations of Biology	4
CHEM 125	Introduction to Chemical Structure and Properties	4
CHEM 201	Purification and Separation Lab I	1
<b>Hours</b>		<b>18</b>
<b>Spring</b>		
Language 112		4
Cultural/Social Difference - Identity		4
BIOL 201	Intermediate Cell Biology and Genetics	4
CHEM 250	Reactions of Nucleophiles and Electrophiles (Reactivity 1)	4
CHEM 202	Purification and Chromatography Lab II	1
<b>Hours</b>		<b>17</b>
<b>Second Year</b>		
<b>Fall</b>		
Language 211		4
THEO 100	Theological Explorations	4
PHYS 105	Physics for the Life Sciences I	4
CHEM 251	Intermediate Reactions of Nucleophiles and Electrophiles (Reactivity 2)	4
CHEM 203	Synthesis Lab	1
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
CHEM 255	Macroscopic Chemical Analysis	4
CHEM 205	Chemical Measurement Lab	1
PHYS 106	Physics for the Life Sciences II	4
MATH 124	Probability and Statistical Inference	4
Social World		4
<b>Hours</b>		<b>17</b>
<b>Third Year</b>		
<b>Fall</b>		
BIOL 307	Biology of Microorganisms	4
MATH 119	Calculus I	4
Artistic Expression		4
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
Study Abroad		
Global Engagement		4
Experiential Engagement		4
Cultural/Social Difference - Systems		4
Human Experience		4
<b>Hours</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
Theological Integrations		4
COMM		4
BIOL 325	Human Anatomy and Physiology I	4
<b>Hours</b>		<b>12</b>
<b>Spring</b>		
INTG 300	Learning Integrations	4
ENGL 311	Creative Nonfiction	4
BIOL 326	Human Anatomy and Physiology II	4
<b>Hours</b>		<b>12</b>
<b>Total Hours</b>		<b>121</b>