

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 |
|---|---|-------|
| Biology | | |
| BIOL 101 | Foundations of Biology | 4 |
| BIOL 212 | Microbiology | 4 |
| or BIOL 307 | Biology of Microorganisms | |
| BIOL 325 & BIOL 326 | Human Anatomy and Physiology I and Human Anatomy and Physiology II | 8 |
| One of the following: ¹ | | 4 |
| 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) | |
| Calculus | | |
| MATH 119 | Calculus I | 4 |
| One of the following: | | 4-8 |
| MATH 124 | Probability and Statistical Inference | |
| MATH 345 & MATH 346 | Mathematical Statistics I and Mathematical Statistics II | |
| The following chemistry courses and labs (labs must be taken for credit): | | 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: ² | | 4 |
| PHYS 191 | Foundations of Physics I | |

| | | |
|--|---------------------------------------|---|
| PHYS 105 | Physics for the Life Sciences I | |
| Select two courses ³ | | 8 |
| Social & Behavioral Sciences Recommended Courses ⁴ | | |
| One of the following: ⁴ | | 4 |
| ENGL 311 | Creative Nonfiction | |
| One of the following: ⁴ | | 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 | |
| COMM 367 | Organizational Communication | |

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

² Physics, algebra, or calculus-based course

³ Recommended courses: psychology, sociology, economics, global issues, political science, anthropology.

⁴ 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 |
|--|--|-------|
| First Year | | |
| Fall | | |
| INTG 105 | College Success | 1 |
| INTG 100 | Foundations (LF) | 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 |
| Hours | | 18 |
| Spring | | |
| Language 112 | | 4 |
| Cultural/Social Difference - Identity (CI) | | 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 |
| Hours | | 17 |
| Second Year | | |
| Fall | | |
| Language 211 | | 4 |
| THEO 100 | Theological Explorations (TE) | 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 |
| Hours | | 17 |
| Spring | | |
| CHEM 255 | Macroscopic Chemical Analysis | 4 |
| CHEM 205 | Chemical Measurement Lab | 1 |
| MATH 124 | Probability and Statistical Inference | 4 |
| Social & Behavioral Science | Not required by U of MN college of Pharmacy if you have BA | 4 |
| Social World (SW) | | 4 |
| Hours | | 17 |
| Third Year | | |
| Fall | | |
| BIOL 307 | Biology of Microorganisms | 4 |
| BIOL 325 | Human Anatomy and Physiology I | 4 |
| Artistic Expression (AE) | | 4 |
| Social & Behavioral Science | Not required by U of MN college of Pharmacy if you have BA | 4 |
| Hours | | 16 |
| Spring | | |
| BIOL 326 | Human Anatomy and Physiology II | 4 |
| MATH 119 | Calculus I | 4 |
| Human Experience (HE) | | 4 |
| Course for major/minor | | 4 |
| Hours | | 16 |
| Fourth Year | | |
| Fall | | |
| Theological Integrations (TI) | | 4 |
| COMM | Not required by U of MN college of Pharmacy if you have BA | 4 |
| Cultural/Social Difference - Systems (CS) | | 4 |
| Courses for Major/Minor | | 4 |
| Hours | | 16 |
| Spring | | |
| INTG 300 | Learning Integrations | 4 |
| ENGL 311 | Creative Nonfiction Not required by U of MN college of Pharmacy if you have BA | 4 |

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|-------------------------|-----|
| Courses for Major/Minor | 8 |
| Hours | 16 |
| Total Hours | 133 |

Pre-Pharmacy with Study Abroad

| Course | Title | Hours |
|---|---|-------|
| First Year | | |
| Fall | | |
| INTG 105 | College Success | 1 |
| INTG 100 | Foundations (LF) | 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 |
| Hours | | 18 |
| Spring | | |
| Language 112 | | 4 |
| Cultural/Social Difference - Identity (CI) | | 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 |
| Hours | | 17 |
| Second Year | | |
| Fall | | |
| Language 211 | | 4 |
| THEO 100 | Theological Explorations (TE) | 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 |
| Hours | | 17 |
| Spring | | |
| CHEM 255 | Macroscopic Chemical Analysis | 4 |
| CHEM 205 | Chemical Measurement Lab | 1 |
| MATH 124 | Probability and Statistical Inference | 4 |
| Social & Behavioral Science | Not required by U of MN college of Pharmacy if you have BA | 4 |
| Additional coursework for major/minor as needed | | 4 |
| Hours | | 17 |
| Third Year | | |
| Fall | | |
| BIOL 307 | Biology of Microorganisms | 4 |
| MATH 119 | Calculus I | 4 |
| Artistic Expression (AE) | | 4 |
| Social World (SW) | | 4 |
| Social & Behavioral Science | Not required by U of MN college of Pharmacy if you have BA | 4 |
| Hours | | 20 |
| Spring | | |
| Study Abroad | | |
| Global Engagement (GL) | | 4 |
| Experiential Engagement (EX) | | 4 |
| Cultural/Social Difference - Systems (CS) | | 4 |
| Human Experience (HE) | | 4 |
| Hours | | 16 |
| Fourth Year | | |
| Fall | | |
| Theological Integrations (TI) | | 4 |
| COMM | Not required by U of MN college of Pharmacy if you have BA | 4 |
| BIOL 325 | Human Anatomy and Physiology I | 4 |
| Additional coursework for major/minor | | 4 |
| Hours | | 16 |

Spring

| | | |
|---------------------------------------|---|------------|
| INTG 300 | Learning Integrations | 4 |
| ENGL 311 | Creative Nonfiction <small>Not required by U of MN college of Pharmacy if you have BA</small> | 4 |
| BIOL 326 | Human Anatomy and Physiology II | 4 |
| Additional coursework for major/minor | | 4 |
| Hours | | 16 |
| Total Hours | | 137 |