

Pre-Professional Health Pharmacy Programs

The following list will take you to the curriculum maps for each potential pre-professional health major for the pharmacy field:

- [B.S. Biology/Pre-Pharmacy](#)
- [B.S. Chemistry/Pre-Pharmacy](#)
- [B.S. Molecular Biology and Biotechnology/Pre-Pharm](#)
- [B.A. Psychology/Pre-Pharmacy](#)
- [B.S. Psychology/Pre-Pharmacy](#)
- [B.A. Sociology/Pre-Pharmacy](#)

Tentative Four-Year Plan: BS Biology / Pre-Pharm

The below is a tentative schedule and assumes the incoming student with the following placements; Pre-Calculus (Math 171) and College Writing II (ENGL 111). It is highly recommended that you consult a pre-professional faculty advisor to adapt the schedule to your particular circumstances.

Please check with any specific Pharmacy program requirements not covered below. Some possible recommended courses would include the following: Micro or Macro Economics, A second English course, Public Speaking, Biochemistry, Social or Behavioral Science

Tentative Four-Year Plan: BS Biology / Pre-Pharm		
Class	Fall Term	Spring Term
Freshman	BIOL 105: Freshman Biology Seminar BIOL 155: Principles of Biology I BIOL 165: Principles of Biology I Laboratory CHEM 153: General Chemistry I CHEM 163: General Chemistry I Laboratory INQ 1XX Freshman Inquiry Seminar ENG 111: College Writing <div style="text-align: right;">Credits: 15</div>	BIOL 156: Principles of Biology II BIOL 166: Principles of Biology II Laboratory CHEM 154: General Chemistry II CHEM 164: General Chemistry II Laboratory MATH 171: Precalculus Gen Ed: Elective (as needed) <div style="text-align: right;">Credits: 15</div>

Summer: Job Shadow and find clinical/volunteer experience

Sophomore	BIOL 201: Genetics BIOL 203: Cell Biology CHEM 251: Organic Chemistry I CHEM 261: Organic Chemistry I Laboratory MATH 270: Calculus I Gen Ed: NFSS 1XX <div style="text-align: right;">Credits: 15</div>	BIOL 202: Principles of Ecology BIOL 341: General Microbiology CHEM 252: Organic Chemistry II CHEM 262: Organic Chemistry II Laboratory Gen Ed: Elective (as needed) <div style="text-align: right;">Credits: 14</div>
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Summer: Job Shadow, clinical/volunteer experience, and PCAT Prep

Junior	PH 251: General Physics I BCHM 453: Biochemistry Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) NFSS 111: Health Education <div style="text-align: right;">Credits: 15</div>	PH 252: General Physics II BCHM 454: Biochemistry II MATH 221: Elem. Applied Stats Gen Ed: Elective (as needed) Gen Ed: English <div style="text-align: right;">Credits: 16</div>
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Summer: Take PCAT and Submit Application

Senior	BIOL Elective (BIOL 300+) BIOL Elective (BIOL 300+) Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) <div style="text-align: right;">Credits: 15-17</div>	BIOL Elective (BIOL 300+) BIOL Elective (BIOL 300+) Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) <div style="text-align: right;">Credits: 15-17</div>
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Tentative Four-Year Plan: BS Chemistry / Pre-Pharm

The below is a tentative schedule and assumes the incoming student with the following placements; Pre-Calculus (Math 171) and College Writing II (ENGL 111). It is highly recommended that you consult a pre-professional faculty advisor to adapt the schedule to your particular circumstances.

Please check with any specific Pharmacy program requirements not covered below. Some possible recommended courses would include the following: Micro or Macro Economics, A second English course, Public Speaking, Biochemistry, Social or Behavioral Science

Tentative Four-Year Plan: BS Chemistry / Pre-Pharm		
Class	Fall Semester	Spring Semester
Freshman	CHEM 151: Chemical Principles I CHEM 161: Chemical Principles Lab MATH 171: Precalculus BIOL 155: Principles of Biology I BIOL 165: Principles of Biology I Lab INQ 1XX: Freshman Inquiry Seminar <div style="text-align: right;">Credits: 15</div>	CHEM 152: Chemical Principles II CHEM 162: Chemical Principles. II Lab MATH 270: Calculus I BIOL 156: Principles of Biology II BIOL 166: Principles of Biology II Lab ENG 111: College Writing <div style="text-align: right;">Credits: 15</div>

Summer: Job Shadow and find clinical/volunteer experience

Sophomore	CHEM 251: Organic Chemistry I CHEM 261: Organic Chemistry I Lab MATH 271: Calculus II PH 251: General Physics I OR PH 258: Introduction to Physics I PH 268: Introduction to Physics I Lab Gen Ed: Elective (as needed) <div style="text-align: right;">Credits: 15</div>	CHEM 252: Organic Chemistry II CHEM 262: Organic Chemistry II Lab CHEM 265: Inorganic Chemistry I CHEM 266: Inorganic Chemistry I Lab PH 252: General Physics II OR PH 258: Introduction to Physics II PH 268: Introduction to Physics II Lab Gen Ed: English <div style="text-align: right;">Credits: 15</div>
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Summer: Job Shadow, clinical/volunteer experience, and PCAT Prep

Junior	CHEM 353: Analytical Chemistry I CHEM 363: Analytical Chemistry I Lab CHEM 366: Inorganic Chemistry II CHEM 367: Inorganic Chemistry II Lab BIOL 201: Genetics BIOL 251: Anatomy and Physiology BIOL 261: Anatomy and Physiology Lab <div style="text-align: right;">Credits: 15</div>	CHEM 358 Analytical Chemistry II CHEM 368 Analytical Chemistry II Lab CHEM 257 Organic Spectroscopy BIOL 341: Microbiology BIOL 252: Anatomy and Physiology BIOL 262: Anatomy and Physiology Lab <div style="text-align: right;">Credits: 15</div>
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Summer: Take PCAT and Submit Application

Senior	CHEM 354: Physical Chemistry I CHEM 364 Physical Chemistry I Lab BCHM 453 Biochemistry I BCHM 463 Biochemistry Lab Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) Gen Ed: NFSS 1XX <div style="text-align: right;">Credits: 15</div>	CHEM 355 Physical Chemistry II CHEM 470 Chemistry Seminar Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) NFSS 111: Health Education <div style="text-align: right;">Credits: 14</div>
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Tentative Four-Year Plan: BS Molecular Biology and Biotechnology / Pre-Pharm

The below is a tentative schedule and assumes the incoming student with the following placements; Pre-Calculus (Math 171) and College Writing II (ENGL 111). It is highly recommended that you consult a pre-professional faculty advisor to adapt the schedule to your particular circumstances.

Please check with any specific Pharmacy program requirements not covered below. Some possible recommended courses would include the following: Micro or Macro Economics, A second English course, Public Speaking, Biochemistry, Social or Behavioral Science

Tentative Four-Year Plan: BS Molecular Biology and Biotechnology / Pre-Pharm		
Class	Fall Term	Spring Term
Freshman	BIOL 105: Freshman Biology Seminar BIOL 155: Principles of Biology I BIOL165: Principles of Biology I Laboratory CHEM 153: General Chemistry I CHEM 163: General Chemistry I Laboratory INQ 1XX: Freshman Inquiry Seminar ENG 111: College Writing <div style="text-align: right;">Credits: 15</div>	BIOL 156: Principles of Biology II BIOL 166: Principles of Biology II Laboratory CHEM 154: General Chemistry II CHEM:164: General Chemistry II Laboratory MATH 171: Precalculus Gen Ed: Elective (as needed) <div style="text-align: right;">Credits: 15</div>

Summer: Job Shadow and find clinical/volunteer experience

Sophomore	BIOL 201: Genetics BIOL 203: Cell Biology CHEM 251: Organic Chemistry I CHEM 261: Organic Chemistry I Laboratory Gen Ed: English NFSS 111: Health Education <div style="text-align: right;">Credits: 15</div>	BIOL 341: General Microbiology CHEM 252: Organic Chemistry II CHEM 262: Organic Chemistry II Laboratory MATH 270: Calculus I BIOL Elective (BIOL 300+) <div style="text-align: right;">Credits: 15</div>
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Summer: Job Shadow, clinical/volunteer experience, and PCAT Prep

Junior	PH 251: General Physics I BCHM 453: Biochemistry BCHM 463: Biochemistry Lab BIOL 483: Molecular Biology Gen Ed: Elective (as needed) <div style="text-align: right;">Credits: 15</div>	BIOL 450: Cell Physiology PH 252: General Physics II MATH 221: Statistics Gen Ed: Elective (as needed) <div style="text-align: right;">Credits: 14</div>
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Summer: Take PCAT and Submit Application

Senior	BIOL Elective (BIOL 300+) BIOL Elective (BIOL 300+) Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) <div style="text-align: right;">Credits: 15-17</div>	BIOL 485: Biotechnology BIOL Elective (BIOL 300+) Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) Gen Ed: NFSS 1XX <div style="text-align: right;">Credits: 15-16</div>
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Tentative Four-Year Plan: BA Psychology/Pre-Pharmacy

The below is a tentative schedule and assumes the incoming student with the following placements; Pre-Calculus (Math 171) and College Writing II (ENGL 111). It is highly recommended that you consult a pre-professional faculty advisor to adapt the schedule to your particular circumstances.

Please check with any specific Pharmacy program requirements not covered below. Some possible recommended courses would include the following: Micro or Macro Economics, A second English course, Public Speaking, Biochemistry, Social or Behavioral Science

Tentative Four-Year Plan: BA Psychology/Pre-Pharmacy		
Class	Fall Term	Spring Term
Freshman	BIOL 155: Principles of Biology I BIOL 165: Principles of Biology I Laboratory ENG 110 or 111: Writing PSY 211: General Psychology SPAN 151/FR 151: Spanish I/French I INQ 1XX Freshman Inquiry Seminar Credits: 16	BIOL 156: Principles of Biology II BIOL 166: Principles of Biology II Laboratory MATH 171: Pre-calculus ENG 111 or advanced writing course PSY 310: Developmental Psychology SPAN 152/FR 152: Spanish II/French II Gen Ed: NFSS 1XX Credits: 18

Summer: Job Shadow

Sophomore	CHEM 153: General Chemistry I CHEM 163: General Chemistry I Laboratory MATH 270: Calculus I PH 251: General Physics I PSY 301: Statistics SPAN 251/FR 251: Spanish III/French III Credits: 18	CHEM 154: General Chemistry II CHEM 164: General Chemistry II Laboratory BIOL 341: General Microbiology PSY 311: Research Methods PSY 354: Abnormal Psychology SPAN 252/FR 252: Spanish IV/French IV NFSS 111: Health Education Credits: 18
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Summer: Job Shadow, clinical/volunteer experience, and PCAT Prep

Junior	CHEM 251: Organic Chemistry CHEM 261: Organic Chemistry Laboratory SCT 113: Public Speaking PSY 355: Social Psychology PSY 3XX: Elective PSY 3XX: Elective Credits: 17	CHEM 252: Organic Chemistry II CHEM 262: Organic Chemistry II Laboratory PHIL 111: Critical Thinking PS 211: American Government PSY 3XX: Elective PSY Elective Credits: 16
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Summer: Job Shadow, clinical/volunteer experience, and PCAT Prep

Senior	ECON 221 or 222: Micro or Macro Economics PSY 470: Senior Seminar PSY Elective BIOL 341: General Microbiology BCHM 453: Biochemistry BCHM 463: Biochemistry Lab Credits: 16	Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) Credits: 15
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Summer: Take PCAT and Submit Application

Note – This tentative academic plan assumes that the required course for this pre-professional program will not be completed until graduation. Thus the student will apply after graduation and have a gap/push year before matriculating into a pre-professional program. Please consult your pre-professional advisor for the feasibility of completing the required course work and other requirements in three years and thus apply before graduation.

Tentative Four-Year Plan: BS Psychology/Pre-Pharmacy

The below is a tentative schedule and assumes the incoming student with the following placements; Pre-Calculus (Math 171) and College Writing II (ENGL 111). It is highly recommended that you consult a pre-professional faculty advisor to adapt the schedule to your particular circumstances.

Please check with any specific Pharmacy program requirements not covered below. Some possible recommended courses would include the following: Micro or Macro Economics, A second English course, Public Speaking, Biochemistry, Social or Behavioral Science

Tentative Four-Year Plan: BS Psychology/Pre-Pharmacy		
Class	Fall Term	Spring Term
Freshman	BIOL 155: Principles of Biology I BIOL 165: Principles of Biology I Laboratory ENG 110 or 111: Writing PSY 211: General Psychology General Education Skills Course INQ 1XX Freshman Inquiry Seminar Credits: 16	BIOL 156: Principles of Biology II BIOL 166: Principles of Biology II Laboratory MATH 171: Pre-calculus ENG 111 or advanced writing course PSY 310: Developmental Psychology General Education Skills Course Credits: 17

Summer: Job Shadow and find clinical/volunteer experience

Sophomore	CHEM 153: General Chemistry I CHEM 163: General Chemistry I Laboratory MATH 270: Calculus I PH 251: General Physics I PSY 301: Statistics General Education Arts and Humanities Course Gen Ed: NFSS 1XX Credits: 18	CHEM 154: General Chemistry II CHEM 164: General Chemistry II Laboratory PH 252: General Physics II PSY 311: Research Methods PSY 354: Abnormal Psychology General Education Arts and Humanities Course NFSS 111: Health Education Credits: 18
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Summer: Job Shadow, clinical/volunteer experience, and PCAT Prep

Junior	CHEM 251: Organic Chemistry CHEM 261: Organic Chemistry Laboratory BIOL 341 Microbiology PSY 355: Social Psychology PSY 351: Biopsychology PSY 3XX: Elective Credits: 17	CHEM 252: Organic Chemistry II CHEM 262: Organic Chemistry II Laboratory PHIL 111: Critical Thinking PS 211: American Government PSY 3XX: Elective PSY 454: Personality Credits: 16
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Summer: Job Shadow, clinical/volunteer experience, and PCAT Prep

Senior	ECON 221 or 222: Micro or Macro Economics PHIL 212: Ethics PSY 470: Senior Seminar PSY Elective BCHM 453: Biochemistry BCHM 463: Biochemistry Lab Credits: 16	AH 101: Medical Terminology PSY Elective PSY Elective Gen Ed: Elective (as needed) Gen Ed: Elective (as needed) Credits: 15
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Summer: Take PCAT and Submit Application

Note – This tentative academic plan assumes that the required course for physical therapy programs will not be completed until after graduation. Thus the student will apply after graduation and have a gap/push year before matriculating into a physical therapy program. Please consult your pre-professional advisor for the feasibility of completing the physical therapy requirements in three years and thus apply before graduation.

Tentative Four-and-a-Half-Year Plan: BA Sociology/Pre-Pharmacy

The below is a tentative schedule and assumes the incoming student with the following placements; Pre-Calculus (Math 171) and College Writing II (ENGL 111). It is highly recommended that you consult a pre-professional faculty advisor to adapt the schedule to your particular circumstances.

Please check with any specific Pharmacy program requirements not covered below. Some possible recommended courses would include the following: Micro or Macro Economics, A second English course, Public Speaking, Biochemistry, Social or Behavioral Science

Tentative Four-and-a-Half-Year-Plan: BA Sociology/Pre-Pharmacy		
Class	Fall Term	Spring Term
First Year	BIOL 155: Principles of Biology I BIOL 165: Principles of Biology I Laboratory ENG 111: College Writing SOC 211: Principles of Sociology SPAN 151/FR 151 or CIS 110: Spanish I/French I or Computer Information Processing INQ 1XX Freshman Inquiry Seminar Credits: 16	BIOL 156: Principles of Biology II BIOL 166: Principles of Biology II Laboratory ANTH 211: Humans and Culture PS 211: American Government SOC Elective SPAN 152/FR 152 or CIS 202: Spanish II/French II or Intro Event Drive Program Credits: 16

Summer: Job Shadow and find clinical/volunteer experience

Sophomore	CHEM 153: General Chemistry I CHEM 163: General Chemistry I Laboratory GEN ED: English Composition PH 251: General Physics I SOC 310 or SOC 312: Classical Social Theory or Microsociology SPAN 251/FR 251 or CIS 217: Spanish III/French III or Application of Microcomputers Credits: 16	CHEM 154: General Chemistry II CHEM 164: General Chemistry II Laboratory MATH 171: Precalculus PH 252: General Physics II SOC Elective SPAN 252/FR 252 or CIS 301: Spanish IV/French IV or Computer Systems Analysis Credits: 16
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Summer: Job Shadow, clinical/volunteer experience, and PCAT Prep

Junior	CHEM 251: Organic Chemistry CHEM 261: Organic Chemistry Laboratory BIOL 341: General Microbiology SOC 450 or SOC 451: Research Methods SOC Elective SOC/SW Elective Credits: 16	CHEM 252: Organic Chemistry II CHEM 262: Organic Chemistry II Laboratory MATH 221: Elementary Applied Statistics PSY 211: General Psychology SOC Elective SOC/SW Elective Credits: 16
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Summer: Take PCAT and Submit Application

Senior	BIOL 251: Anatomy & Physiology I BIOL 252: Anatomy & Physiology I Lab COM 113: Public Speaking GEN ED: Personal Performance MATH 270: Calculus SOC/SW Elective Credits: 14	BIOL 261: Anatomy & Physiology II BIOL 262: Anatomy & Physiology II Lab PHIL 111: Critical Thinking HPE 111: Health Education SOC Elective SOC/SW Elective Credits: 15
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Fifth Year*	ECON 221 or 222: Micro/Macro Economics PHIL 212: Ethics GEN ED: Arts & Humanities GEN ED: Social & Behavioral Science (WGS Course) Credits: 12	* These courses could also be taken during the summers to finish in 4 years.
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