

**Thank you for your interest in the University at Buffalo!**

You are ready to apply via PharmCAS when you plan to have all undergraduate prerequisite courses completed by the end of the summer semester prior to fall matriculation. The following courses satisfy prerequisite expectations for our professional Doctor of Pharmacy [PharmD] degree program:

**Pharmacy Prerequisite Courses**

Introductory Biology I with Laboratory  
 Introductory Biology II with Laboratory  
 General Chemistry I with Laboratory  
 General Chemistry II with Laboratory  
 Organic Chemistry I with Laboratory  
 Organic Chemistry II with Laboratory  
 Calculus I  
 Anatomy  
 Physiology  
 Microbiology  
 Biochemistry  
 Statistics  
 English Composition I  
 English Composition II  
 Social Behavioral Science

**John Carroll University Courses**

BL 159 Principles of Biology III & BL 160 Principles of Biology Laboratory III  
 BL 155 Principles of Biology I & BL 157 Principles of Biology Laboratory I  
 CH 141 General Chemistry I & CH 143 General Chemistry Laboratory I  
 CH 142 General Chemistry II & CH 144 General Chemistry Laboratory II  
 CH 221 Organic Chemistry I & CH 223 Organic Chemistry Laboratory I  
 CH 222 Organic Chemistry II & CH 224 Organic Chemistry Laboratory II  
 MT 135 Calculus and Analytic Geometry I  
 BL 230+L & 231+L Hum Ana & Physio I & II or BL 350+L Vertebrate Anatomy  
 BL 230+L & 231+L Hum Ana & Physio I & II or BL 360+L Human Physiology  
 BL 310 & 310L Microbiology & Laboratory or BL 410 Medical Microbiology  
 CH 431 General Biochemistry or CH 435 & CH 436 Biochemistry I & II  
 MT 122 Elementary Statistics or MT 228 Statistics for the Biological Sciences  
 EN 103 Basic Comp or EN 111 Comp & Rhetoric I or EN 125 Academic Writing  
 EN 112 Composition & Rhetoric II or EN 114 Advanced Freshman Composition I  
 Any course offered in CO, EC, PS, or SC