

Union University School of Pharmacy Admission & Prerequisite Coursework



Admission to the Union University School of Pharmacy is by committee action, based on the overall record and aptitude of the applicant. To be considered for admission to the school, applicants must be eligible for admission to Union University and complete all of Union University's pre-pharmacy requirements.

A grade-point average of 2.75 or greater on a 4.0 scale is required for pre-pharmacy coursework with a grade "C" or higher for each required pre-pharmacy course. The overall academic average for all courses completed must not be less than 2.5 on a 4.0 scale.

All candidates are required to take the Pharmacy College Admission Test (PCAT). Three references must also be submitted. An on-site interview is required as a part of the admission process; a writing sample will be required as a part of the interview process. Interviews are conducted by invitation only. While there is a deadline of March 1 of the year in which admission is desired, applicants are encouraged to apply early, as space is limited, and applications will be reviewed on a rolling basis throughout the year until the class is filled. The School of Pharmacy admits only one class per year.

Admission to the School of Pharmacy requires the completion of pre-professional coursework, distributed as follows:

Course	Semesters	Quarters
*Biology or Zoology	2	3
*General Chemistry	2	3
*Organic Chemistry	2	3
*Human Anatomy and Physiology	2	3
*Physics I	1	2
*Microbiology	1	1
*Calculus	1	2
*Statistics	1	1
Written Composition	2	3
Communications/Speech	1	1
+Humanities Electives	2	3
+Social Sciences Electives	2	3
+General Electives	1	2

Union University students will follow either a Chemistry or Biology track with additional coursework required for the terminal degree.

Notes:

Courses that will increase the strength of the applicant's candidacy include biochemistry, immunology, genetics, and a second semester of physics.

*For all science, calculus or statistics courses, the prospective pharmacy student should take courses which are suitable for science majors intending graduate study and should include laboratories when available. The calculus course(s) should include both differential and integral calculus.

+Elective courses must conform to the following distribution and requirements:

Humanities Electives include courses from arts, history language, literature, or philosophy.

Social Sciences Electives include courses from anthropology, economics, political science, psychology, or sociology.

General Electives may be taken in any area(s) the student desires (Christian studies, sciences, mathematics, humanities or social sciences).

It is also strongly recommended that candidates for a Doctor of Pharmacy program gain work experience in a pharmaceutical setting prior to application.

Coursework Descriptions

Descriptions of courses based on the Union University Undergraduate Catalog

A GPA of 2.75 or greater on a 4.0 scale is required for pre-pharmacy coursework with a grade of C or higher for each required pre-pharmacy course. The overall GPA for all courses completed must not be less than a 2.5 on a 4.0 scale.

Biology or Zoology (2 semesters)

Principles of Biology (BIO112) A study of the basic characteristics of organisms, dealing with structure, function, reproduction, and ecology. (Three hours lecture and three hours laboratory/week.)

Any other biology or zoology course from the major/minor will satisfy this pre-requisite.

General Chemistry (2 semesters)

General Chemistry (CHE111) A comprehensive study of the fundamental experiments, principles, and theories of chemistry with emphasis on the quantitative relationships. The structure and properties of matter with their energy relationships are stressed. (Three lecture hours and one 3-hour laboratory/week.)

Chemical Equilibrium (CHE112) Detailed study of the principles of equilibrium in chemical systems. The laboratory is quantitative analysis. (Three hours lecture and one 3-hour laboratory period/week.)

Organic Chemistry (2 semesters)

Organic Chemistry 1 (CHE314) An introduction to the compounds of carbon, with emphasis on the relationship between structure and properties. Applications of bonding theory, reaction mechanism, and stereochemistry are included. Some functional groups containing halogen and oxygen will be examined in detail.

Organic Chemistry Laboratory (CHE324) Introduction to the basic techniques for the physical characterization and isolation of organic compounds. Use of spectrometric methods as applied to the determination of structure is included, as are some synthetic methods. (Two 3-hour labs/week.)

Organic Chemistry II (CHE315) An in-depth examination of the common oxygen and nitrogen functional groups with respect to structure and chemistry. Continued application of basic theory is included. Heterocyclic and biomolecules will also be examined. (Three lectures/week.)

Organic/Inorganic Synthesis Laboratory (CHE326) Application of laboratory techniques in synthesis and characterization of organic and inorganic compounds. (Two 3-hour labs/week.)

Human Anatomy and Physiology (2 semesters)

Human Anatomy and Physiology (BIO221) Body systems studied include the integumentary, cardiovascular, lymphatic, skeletal, and muscular. (Three hours lecture and two hours laboratory/week.)

Human Anatomy and Physiology (BIO222) Body systems studied include the urinary, nervous, endocrine, digestive, and respiratory. (Three hours lecture and two hours laboratory/week.)

Physics I (1 semester)

University Physics I (PHY231) The study of classical mechanics, wave motion, fluid flow and sound.

†University Physics II with Calculus (PHY232) The study of temperature and heat, electricity, magnetism, light and optics. (Four lectures and one laboratory/week.)

Microbiology (1 semester)

Microbiology (BIO211) Classification, morphology, physiology, and ecology of bacteria and viruses, with special emphasis on bacteria. (Three hours lecture and three hours laboratory/week.)

Calculus (1 semester)

Calculus and Analytic Geometry (MAT211) Topics include basic concepts of plane analytic geometry, functions, limits, differentiation of algebraic and trigonometric functions, applications of the derivative, the indefinite and the definite integral, and the fundamental theorem of calculus.

†Calculus and Analytic Geometry II (MAT212) Topics include integration by substitution, numeral integration, applications of the definite integral, the calculus of transcendental functions, techniques of integration, and the calculus of parameterized curves.

Statistics (1 semester)

Statistics (MAT208) This is a calculus-based statistics course. Topics include descriptive statistics, probability theory, discrete and continuous random variables, common discrete distributions, the normal distribution, sampling distributions, and applications to confidence interval estimates and hypothesis testing.

Written Composition (2 semesters)

Written Composition I (ENG 111) Includes a study of the principles of grammar, usage, and rhetoric, emphasizing the writing of clear, effective exposition.

Written Composition II (ENG112) Includes library orientation and instruction in research methods. Students will write critical themes and a research paper.

Communications/Speech (1 semester)

Public Communications (COM112) An oral communication skills course that emphasizes organizing thoughts, adapting messages to specific audiences, using language correctly, delivering messages verbally and nonverbally with confidence, and active listening and evaluation skills.

+Humanities Electives (2 semesters)**+Social Sciences Electives (2 semesters)****+General Electives (1 semester)**

† = not required but strongly recommended