HEALTH PROFESSIONS PATHWAY

Bachelor of Science in Vision Science

The University of the Incarnate Word Rosenberg School of Optometry (UIWRSO) is one of only 23 optometry schools in the U.S., and the only one associated with a faith-based institution. The B.S. in Vision Science degree is a pre-optometry pathway. Courses are conducted by Doctors of Optometry, many with Doctors of Philosophy in Vision Science and related fields as well as substantive research training. Students receive challenging, contemporary didactic courses in applied vision science, neuroscience of the visual system, physiology and anatomy of the eye, pharmacology and optics. This is the only program in the country where undergraduate students spend a substantial amount of time learning under the guidance and supervision of clinical academic faculty and professional staff in both the classroom and out-patient clinical settings.

11th Grade

FALL

MATH 1304
BIOL 2321
BIOL 2121

SPRING

MATH 2303
BIOL 1402
BIOL 1402L
PSYC 1301

12th Grade

FALL

MATH 1311
CHEM 1301
CHEM 1101
UIW CORE

SPRING

MATH 2312
CHEM 1302
CHEM 1102
UIW CORE

DOCTOR OF OPTOMETRY DIRECT ADMIT PROGRAM

The Doctor of Optometry program of study offers two tracks including an accelerated curriculum for the advanced undergraduate student who is interested in a Doctor of Optometry (O.D.) degree.

SCAN NOW

Learn more about the Rosenberg School of Optometry.

PROFESSIONAL DEGREE OPTIONS

Doctor of Optometry
M.S. in Vision Science
Ph.D. in Vision Science

BRAINPOWER CONNECTION'S COLLEGE CONNECTION PROGRAM

The Brainpower Connection's College Connection Program offers a seamless transition to the University of the Incarnate Word and its Health Professions schools, accelerating their academic pathway to UIW and post-secondary education at a reduced tuition rate. Eligible students attend college classes on the UIW campus. These dual credit courses will help students to succeed in college and provide opportunities to engage in student life activities. Health professions students must have a C or better in all college courses for major, minor, concentration, and/or specialization.

FOR MORE INFORMATION

Contact Patricia L. Ramirez, director of Brainpower Connection Programs, at (210) 283-6300 or plramire@uiwtx.edu.

BRAINPOWER CONNECTION
UNIVERSITY OF THE INCARNATE WORD

B.S. in Vision Science Course Descriptions

BIOL 2321 Anatomy and Physiology I

This course is the first of a two-course sequence. It examines the gross structure and functions of the human body including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular, nervous, and special senses. It is designed for students in biology, the health professions, and physical education.

BIOL 2121 Anatomy and Physiology I Lab

Corequisite laboratory section of BIOL 2321.

BIOL 1402 General Biology I

This course studies the cellular and molecular biology of living organisms. Cell structure and function, metabolism, and genetics are emphasized. It serves as a foundation for advanced courses in biology and is for science majors.

BIOL 1402L General Biology I Lab

Corequisite laboratory section of BIOL 1402.

CHEM 1301 Chemical Principles I

This course studies fundamental laws and theories of chemistry: the modern concept of the atom, atomic structure and periodic properties of the elements, kinetic-molecular theory, states of matter, solutions, acids, bases, and salts, oxidation-reduction, equilibrium, thermodynamics, electrochemistry, nuclear chemistry and bonding. **Prerequisite: MATH 1304 OR MATH 1311 OR MATH 2312.**

CHEM 1101 Chemical Principles I Lab

Corequisite laboratory section of CHEM 1301.

CHEM 1302 Chemical Principles II

This course studies fundamental laws and theories of chemistry: the modern concept of the atom, atomic structure and periodic properties of the elements, kinetic-molecular theory, states of matter, solutions, acids, bases, and salts, oxidation-reduction, equilibrium, thermodynamics, electrochemistry, nuclear chemistry and bonding.

CHEM 1102 Chemical Principles II Lab

Corequisite laboratory section of CHEM 1302.

MATH 1304 College Algebra

This three-hour course covers algebraic operations, functions, and functional notation; polynomial equations and inequalities; graphing techniques, graphs of polynomial and rational functions; logarithms and exponentials; and problems from the physical and social sciences and business.

MATH 1311 Pre-Calculus

This is a three-hour course that focuses on the properties of functions and their inverses with the study of trigonometric, logarithmic, and exponential functions. Students will learn concepts essential to the study of calculus, including but not limited to sequences, series, analytic trigonometry, and analytic geometry. **Prerequisite: MATH 1304.**

MATH 2312 Calculus I

This is a three-hour course that includes functions, limits, derivatives, indeterminate forms, and integrals; exponential and logarithmic functions; trigonometric functions; and applications. **Prerequisite: MATH 1311.**

MATH 2303 Probability and Statistics

This course covers elementary probability theory, as well as techniques of statistical inference including sampling theory, estimation procedures, and hypothesis testing. **Prerequisite: MATH 1304 or higher.**

PSYC 1301 Introduction to Psychology

This course studies the basic facts and principles of psychology.

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