
Office of Student Affairs and Admissions	713-743-2040
Office of the Dean	713-743-1899
Clinic Administrator	713-743-1886
Clinic Patient Appointments	713-743-2020
Clinic Optical Service	713-743-2030
Library	713-743-1910

Dean: Jerald W. Strickland, O.D., Ph.D., Indiana University
Associate Dean for Professional Studies: Roger L. Boltz, O.D., Ph.D., University of Houston
Associate Dean for Graduate Studies and Research: Earl L. Smith III, O.D., Ph.D., University of Houston
Director of Student Affairs and Admissions: Julie Jackson, R.N.; O.D., University of Houston
Director of Learning Resources: Suzanne Ferimer, M.L.S., University of Kentucky

Degrees Offered

The College of Optometry offers the Doctor of Optometry (O.D.) degree and the Master of Science and Doctor of Philosophy degrees in physiological optics.

Each year 100 students are admitted to the four-year professional program leading to the Doctor of Optometry degree. All applicants must have earned a baccalaureate degree prior to matriculation into the Doctor of Optometry program.

This section provides an overview of the profession and information on undergraduate preparation for admission to the professional (O.D.) program. The *Graduate and Professional Studies* catalog contains detailed information concerning the college's graduate and professional degree programs. The program of graduate study in physiological optics is designed for students who wish to pursue an academic career in teaching and vision research.

The Profession

Doctors of Optometry are independent primary health care providers who specialize in the examination, diagnosis, treatment and management of diseases and disorders of the visual system, the eye and associated structures as well as the diagnosis of related systemic conditions.

Graduates may enter private practice or serve in multidisciplinary primary care clinics. Graduates also find careers in public health, teaching and research, and health administration. Residencies/fellowships are available in pediatrics, primary care, contact lenses, rehabilitative optometry, hospital-based optometry, cornea and ocular disease, and neuro-ophthalmology. Special services for children, the elderly, and the partially-sighted can each be exclusively practiced. Helping to care for vision, our most treasured sense, makes optometry a rewarding profession for students interested in a health career.

Doctor of Optometry Program

The educational missions of the University of Houston College of Optometry are to educate and train sufficient optometrists to serve the needs of Texas primarily, but also to provide education and training for residents of other states and nations; to educate and train qualified teachers and researchers in optometry and vision sciences; to provide post-doctoral education in advanced clinical areas (residencies); and to provide training for practitioners in new developments and the medical sciences. Our research mission is to add to the body of knowledge identified as vision science and to its effective application, and to extend the scope of practice and improve the quality of optometric care. The service missions of the College are to provide counsel and support to the profession in its quest to improve optometric services; to help provide appropriate health education to the public; to help extend care to those segments of society which are underserved; and to provide advice and counsel to the international optometric sector.

The College of Optometry's major responsibility is to educate and to train students who, upon graduation, are able to provide all of the diagnostic and treatment services that characterize the general practice of optometry. Educational objectives have been established for each course in the professional curriculum which support this broad purpose. The institutional objectives are to ensure that each student:

- acquires a sound foundation in basic and clinical sciences essential for the practice of optometry
- learns the technical, communicative, and interpersonal skills required to apply that knowledge
- develops an understanding of the forces—legislative, legal, ethical, technical and socioeconomic—which influence health care
- acquires ethical insights and moral attitudes required to insure that the best interests of the patients are served
- becomes involved in discovery, transmittal, and application of knowledge through participation in, or appreciation of, scientific inquiry
- develops self-confidence in decision-making, acceptance of responsibility and characteristics of a professional person
- becomes committed to keeping abreast of new knowledge and technology and their applications as a continuing obligation to patients.

The College

The College of Optometry, established at the University of Houston in 1952, has resided since 1976 in one of the most modern facilities designed for optometric education and vision science research in the country. The teaching and research activities of the college are facilitated by the year-round operation of an outpatient clinic, The University Eye Institute, up-to-date research laboratories, an extensive library collection, a computer center, and instructional services.

Accreditation

The College of Optometry is fully accredited by the Accreditation Council on Optometric Education of the American Optometric Association.

Pre-Optometry Professional Society (POPS)

University of Houston undergraduate students with an interest in optometry are encouraged to join the Pre-Optometry Professional Society (POPS). POPS members meet frequently and maintain a constant dialogue with the College of Optometry administration, students and Office of Student Affairs and Admissions.

Pre-Optometry Curriculum

The college welcomes inquiries concerning the selection of pre-optometric courses at other institutions and urges students to solicit this service through its Office of Student Affairs and Admissions. The University of Houston does not offer a degree in pre-optometry studies.

Admission Prerequisites

To be considered for admission to the College of Optometry, students must have completed a baccalaureate degree prior to matriculation. In addition to the degree, a minimum of 55 semester credit hours or the equivalent, must be completed in the following five subject areas. The minimum number in each is indicated. Courses at the University of Houston that fulfill these minimum requirements are listed under each subject heading and described in the section on prerequisite courses.

Requirements	Hours
Biology (20 semester hours)	
Introduction to Biological Sciences	8
Elementary Microbiology and Laboratory	4
Human Anatomy and Lab	4
Human Physiology and Laboratory (upper division)	4
Chemistry (15 semester hours)	
Inorganic Chemistry and Laboratory	8
Organic Chemistry and Laboratory	4
General Biochemistry	3
Mathematics (six semester hours)	
Elementary Functions	3
Calculus I	3
Physics (eight semester hours)	
Introductory General Physics and Laboratory	8
Psychology (six semester hours)	
Introduction to Psychology	3
Statistics	3

Pre-optometry students are strongly encouraged to major in an area in which they have special interests, including disciplines within the humanities or social sciences. The pre-optometry curriculum can usually be adapted from a pre-medical, pre-dental, biology, or chemistry curriculum with minor changes. Prospective applicants should consult with advisors in their major field of study to determine degree requirements in that major or to determine entry into prerequisite courses. Elective courses that are especially relevant to optometry are listed near the end of this catalog section.

Undergraduate Courses Offered by the College of Optometry

Courses: Optometry (OPTO)

The College of Optometry offers undergraduate courses to students interested in careers in licensed health professions.

1300: Introduction to Health Professions Cr. 3. (3-0). Introduction to health care delivery systems in the U.S. with emphasis on the role of various professions (e.g., optometry, medicine, osteopathy, dentistry, pharmacy, nursing, podiatry, social work, clinical psychology, allied health professions). For students considering careers in the health professions.

University of Houston Courses which Fulfill Prerequisite Requirements

Biochemical and Biophysical Sciences (BCHS)

3304: General Biochemistry I (formerly 4304) Cr. 3. (3-0). Prerequisites: CHEM 3221 and 3331. May not apply toward degree until BCHS 3201 is successfully completed. Nature of the chemical constituents of living organisms, including carbohydrates, lipids, nucleic acids, and enzymes.

Biology (BIOL)

1134: Human Anatomy and Physiology Laboratory I Cr. 1. (0-3). Prerequisite: credit for or concurrent enrollment in BIOL 1334. May not apply toward a major in natural sciences and mathematics. Laboratory studies of the structure and function of the human body.

1144: Human Anatomy and Physiology Laboratory II Cr. 1. (0-3). Prerequisite: credit for or concurrent enrollment in BIOL 1344. May not apply toward a major in natural sciences and mathematics. Laboratory studies of the structure and function of the human body.

1334;1344: Human Anatomy and Physiology Cr. 3 per semester. (3-0). May not apply toward a major in natural sciences and mathematics. Structure and function of the human body.

1431;1432: Introduction to Biological Science Cr. 4. (3-3). Credit may not be received for both BIOL 1431;1432 and BIOL 1310;1320. Designed for science majors and preprofessional students. Introduction to biological science, including biochemistry, cellular and molecular biology, genetics, physiology, ecology, evolution, and behavior.

2133: Elementary Microbiology Laboratory Cr. 1. (0-3).

2333: Elementary Microbiology Cr. 3. (3-0). Fundamental principles of microbiology.

3124: Human Physiology Laboratory Cr.1. (0-3). Prerequisite: credit for or concurrent enrollment in BIOL 3324. Demonstrations and experiments in organismic bodily function.

3324: Human Physiology Cr. 3. (3-0). Prerequisite: twelve semester hours in biology, including BIOL 1432, and BCHS 3304 or consent of instructor. Integrated treatment of bodily function from molecular to organismic levels.

Chemistry (CHEM)

1111-1112: Fundamentals of Chemistry Laboratory Cr. 1 per semester. (0-3). Prerequisite: credit for or concurrent enrollment in CHEM 1331-1332. Credit may not be applied toward a degree for both CHEM 1111-1112 and CHEM 1101. Illustrate and reinforce principles and concepts by use of quantitative experiments, emphasizing interpretation and reporting of data and facility in handling scientific instruments.

1331: Fundamentals of Chemistry Cr. 3. (3-0). For science and engineering majors. May not apply toward degree until CHEM 1111 is successfully completed. Credit may not be received in both CHEM 1331 and 1301. Modern concepts using mathematics for understanding principles, fundamental laws, atomic and molecular structure, states of matter, equilibrium, kinetics, and elementary inorganic, nuclear, and organic chemistry.

1332: Fundamentals of Chemistry Cr. 3. (3-0). For science and engineering majors. May not apply toward degree until CHEM 1112 is successfully completed. Credit may not be received in both CHEM 1332 and 1302. Modern concepts using mathematics for understanding principles, fundamental laws, atomic and molecular structure, states of matter, equilibrium, kinetics, and elementary inorganic, nuclear, and organic chemistry.

3221: Fundamentals of Organic Chemistry Laboratory Cr. 2. (0-6). Prerequisites: CHEM 1112, 1332, and credit for or concurrent enrollment in CHEM 3331, 3332. Syntheses, reaction mechanisms, and qualitative organic analysis.

3331: Fundamentals of Organic Chemistry Cr. 3. (3-0). Prerequisites: CHEM 1112 and 1332. May not apply toward degree until CHEM 3221 and 3222 are successfully completed.

Mathematics (MATH)

1330: Elementary Functions Cr. 3. (3-0). Prerequisite: credit for or placement out of MATH 1310. Functions and graphs, trigonometry, analytic geometry.

1431: Calculus I Cr. 4. (4-0). Calculus of rational functions: limits, derivatives, applications of the derivatives, antiderivatives, definite integral with applications, mean value theorem, fundamental theorem of calculus, and numerical integration.

Physics (PHYS)

1101: General Physics Laboratory I Cr. 1. (0-3). Prerequisite: credit for or concurrent enrollment in PHYS 1301. Selected experiments in elementary physics.

1102: General Physics Laboratory II Cr. 1. (0-3). Prerequisite: MATH 1330 or equivalent. Primarily for majors other than physics, mathematics, and engineering. Elementary principles of mechanics, heat, electromagnetism, and modern physics.

1301: Introductory General Physics Cr. 3. (3-0). Prerequisite: MATH 1330 or equivalent. Primarily for majors other than physics, mathematics, and engineering. Elementary principles of mechanics, heat, electromagnetism, and modern physics.

1302: Introductory General Physics Cr. 3. (3-0). Prerequisite: MATH 1330 or equivalent. Primarily for majors other than physics, mathematics, and engineering. Elementary principles of mechanics, heat, electromagnetism, and modern physics.

Psychology (PSYC)

1300: Introduction to Psychology Cr. 3. (3-0). Principles and theories of psychology, including methodology and brief analysis of major content areas ranging from development, perception, and learning, to motivation/emotion, personality, and social processes.

2301: Introduction to Methods in Psychology Cr. 3. (3-0). Prerequisites: PSYC 1300 and two years of high school algebra or the equivalent. Understanding the evaluation of research in psychology, including the conceptual basis of descriptive and inferential statistics and design techniques.

Elective Courses

The following courses are relevant to preparation for the professional study of optometry. Courses from this list or similar courses offered elsewhere may be taken to fulfill the core distribution requirement.

Courses	Hours
Anthropology	
ANTH 2301. Introduction to Physical Anthropology	3
ANTH 2302. Introduction to Cultural Anthropology	3
ANTH 3342. Food and Culture	3
ANTH 3360. Human Variation	3
ANTH 3361. Human Origins	3
ANTH 4331. Medical Anthropology	3
Biochemical and Biophysical Sciences	
BCHS 4361. Clinical Biochemistry	3
Biology	
BIOL 3407. Introductory Biometrics	4
BIOL 4315. Neuroscience	3
BIOL 4323. Immunology	3
BIOL 4374. Cell Biology	3
Computer Literacy	
COSC 1410. Introduction to Computer Science	4
DISC 2373. Introduction to Computers and Management Information Systems	3

Optometry

Human Development and Consumer Sciences	
HDCS 4369. Entrepreneurship	3

Management	
MANA 3335. Introduction to Organizational Behavior and Management	3

Mathematics	
MATH 1432. Calculus II	4
MATH 2433. Calculus III	4

Nutrition	
NUTR 2332: Introduction to Human Nutrition	3

Optometry	
OPTO 1300. Introduction to Health Professions	3

Philosophy	
PHIL 1301. Introduction to Philosophy	3
PHIL 1305. Introduction to Ethics	3
PHIL 1321. Logic I	3
PHIL 3350. Ethics	3
PHIL 3388. History of Twentieth Century Philosophy	3

Physics	
PHYS 3312. Modern Optics	3

Psychology	
PSYC 2350. Child Development	3
PSYC 2351. Psychology of Adolescence	3
PSYC 3341. Physiological Psychology	3
PSYC 4343. Perception	3
PSYC 4363. Abnormal Child Psychology	3