



Health Professions Academic Preparation

Optometry

An undergraduate education provides students with the opportunity to grow personally and intellectually; allowing them the time and resources to discover a breadth of new ideas and topics as well as to build and to explore in depth their own interests and passions. Therefore, students should seek a broad education during their undergraduate years. There is no required major for entrance to optometry programs. **The following courses represent what can be taken at UTSA to fulfill the prerequisites for entrance to the University of Houston College of Optometry (UHCO) Doctor of Optometry (O.D.) program.** Students are encouraged to incorporate these requirements into their semester by semester plans for completion of their baccalaureate degree, which is also required by the UHCO. Further, because there is some variation in requirements for other optometry programs, students are advised to consult individual programs for their specific and most current information. A supplemental worksheet that details prerequisite coursework for the other Texas optometry school, the University of the Incarnate Word School of Optometry, may also be available upon request in the University Health Professions Office (UHPO).

Required Areas of Study	UTSA Course	Grade/ Sem	Prerequisites/Corequisites
General Biology (two courses with corresponding labs)	BIO 1404		Completion of or concurrent enrollment in MAT 1023 (not recommended for pre-optometry students) or MAT 1073 or higher; CHE 1073 or higher also <i>recommended by the UHPO</i>
	BIO 1122 Lab		Completion of or concurrent enrollment in BIO 1404
	BIO 1413		BIO 1404
Microbiology (one course with corresponding lab)	BIO 3713		BIO 1413/1122; BIO 2313 w/ concurrent enrollment in BIO 3722 <i>recommended</i>
	BIO 3722 Lab		Concurrent enrollment in BIO 3713 <i>recommended</i>
Advanced Biology (two courses with corresponding labs) <i>NOTES: The UH College of Optometry requires eight hours of coursework in advanced biology for which anatomy and physiology are highly recommended. Other advanced biology courses can be taken to fulfill this requirement at the discretion of the admissions committee.</i> <i>BIO 3123 was formerly BIO 2123; BIO 3132 was formerly BIO 2132.</i>	BIO 3123 Anatomy		BIO 1413
	BIO 3132 Anatomy Lab		BIO 1413
	BIO 3413 Physiology		BIO 2313, MAT 1193, and STA 1403
	BIO 3422 Physiology Lab		Completion of or concurrent enrollment in BIO 3413
Biochemistry (one course)	¹ BIO 3513 or ² CHE 4303		¹ CHE 2603 and CHE 2612; ² CHE 3643
General Chemistry (two courses with corresponding labs)	¹ CHE 1103 or ² CHE 1143		¹ Passing grade on Chemistry Placement Exam or C or better in CHE 1073 and completion of or concurrent enrollment in MAT 1073; ² Grade of "B" or higher in MAT 1073 and CHE 1073 or score of 60% or higher on chemistry placement exam
	CHE 1122 Lab and CHE 1120 Lab Lecture		Completion of or concurrent enrollment in CHE 1103 or CHE 1143
<i>Continued on reverse</i>			



General Chemistry continued	¹ CHE 1113 or ² CHE 1153	¹ CHE 1103; ² "C" or better in CHE 1143 or "B" or better in CHE 1103 with instructor consent
	CHE 1132 Lab and CHE 1130 Lab Lecture	Completion of or concurrent enrollment in CHE 1113 or CHE 1153
Organic Chemistry (one course with corresponding lab) <i>NOTE: CHE 2603 was formerly CHE 2604.</i>	CHE 2603	CHE 1113 or CHE 1153 <i>and</i> CHE 1132
	CHE 2612 Lab and CHE 2610 Lab Lecture	Completion of or concurrent enrollment in CHE 2603
Physics (two courses with corresponding labs)	PHY 1603 or PHY 1903 or 1943	MAT 1023 (not recommended for pre-optometry student) or MAT 1073
	PHY 1611 Lab or PHY 1911 (w/1903) or 1951 (w/1943)	Completion of or concurrent enrollment in PHY 1603
	PHY 1623 or PHY 1923 or 1963	PHY 1603
	PHY 1631 Lab or PHY 1931 (w/1923) or 1971 (w/1963)	PHY 1611 and completion of or concurrent enrollment in PHY 1623
Calculus (one course)	MAT 1193 or MAT 1214	MAT 1093 or satisfactory placement exam score
Psychology (one course)	PSY 1013 or higher	
Statistics (one course)	STA 1053, PSY 2073, or higher	Varies by course

Please note that the previously listed UTSA courses and prerequisites are for students following the 2010-2012 Undergraduate Catalog. Students following another undergraduate catalog should consult an advisor with any questions about course numbering.

Foundation Courses: For students who are not prepared to go directly into the required courses, it will be necessary to enroll first in foundation courses such as basic chemistry and an appropriate mathematics course. It may also be necessary to take the mathematics and chemistry placement tests to determine proficiency. For additional information, students should contact an advisor early on in their studies.

Timeline: Students who enter their undergraduate studies with the intention of entering optometry school just after graduation should complete the core pre-optometry coursework by the spring semester of their junior year. This will allow a student time to complete their degree requirements prior to graduation in May of the following year. It is not unusual, however, that a student will decide later in their academic career to pursue optometry. Arriving at the decision later does not necessarily place a student at a disadvantage. It will, though, require a student to postpone the application to optometry school until pre-optometry course requirements are fulfilled.



Advanced Biology Electives Relevant to Optometry Education: The following subjects in biology have relevance to health professions education. Thus, taking courses such as those below during your pre-optometry preparation is recommended.

BIO 3013 Introduction to Clinical Medicine	BIO 3163 Histology & Cytology
BIO 3433 Neurobiology	BIO 3623 Neuropsychopharmacology
BIO 3663 Human Embryology	BIO 3813 Cellular Biology
BIO 3913 Molecular Biology	BIO 4143 Developmental Biology
BIO 4453 Endocrinology	BIO 4743 Immunology

Additional Elective Courses to Consider: Health professions education is placing a greater emphasis upon coursework in the social and behavioral sciences. Thus, an understanding of the broader context within which optometry is practiced on an everyday basis can be beneficial to students.

- ANT 3523 Medical Anthropology
- COU 3103 Helping Skills
- HIS 3453 History of Medicine in America
- HTH 4503 Human Disease and Epidemiology
- HTH 4533 Nutrition and Health
- MGT 4953 Introduction to Healthcare Management
- PSY 4253 Psychology and Health
- SOC 3213 Medical Sociology
- SPN 2513 Spanish for Health Careers

Application Process: Students may apply to the UH College of Optometry through the Optometry Centralized Application Service (OptomCAS). Other application requirements include: a UH College of Optometry supplemental application, a nonrefundable application fee, official college transcripts from all undergraduate institutions attended, Optometry Admission Test (OAT) scores, letters of evaluation, and an interview. **The deadline to submit the OptomCAS and supplemental applications for admission to the UH College of Optometry is February 15. However, students are encouraged to submit their application materials well in advance of this deadline.**

Currently, the University of the Incarnate Word College of Optometry is the only other school of optometry in Texas. For a list of other optometry programs located across the country, please visit the website for the Association of Schools and Colleges of Optometry (ASCO) at: www.opted.org. ASCO's OptomCAS can be used to apply to many optometry schools across the nation. However, students are advised to refer to individual programs regarding their particular prerequisites and application requirements.

Selection Criteria: The Admissions Committee at the UH College of Optometry uses the following criteria in determining an applicant's academic and personal qualifications for admission to the college:

- Undergraduate academic record
- Evidence of ability to handle a course load of 18-20 semester credit hours
- Evaluation of qualities such as leadership, motivation, social awareness, well-roundedness and knowledge of profession
- Applicant's service to his or her community and college, work experience and interpersonal skills
- Written and oral communication skills
- Evidence received through letters of evaluation validating academic ability and achievement as well as personal qualities such as self-confidence, initiative and ability to work with others.

Other optometry schools and colleges may use similar selection criteria. However, students may want to research individual schools and colleges for any criteria particular to their program.



OAT: The Optometry Admission Test (OAT) is a standardized exam required by all schools and colleges of optometry for admission. The OAT consists of four tests: Survey of the Natural Sciences (Biology, General Chemistry, and Organic Chemistry), Reading Comprehension, Physics and Quantitative Reasoning. Most students complete two to three years of college education that include biology, inorganic chemistry, organic chemistry, and physics before taking the exam.

The OAT is administered via computer, and the score is based on an examinee's number of correct answers. This so, guessing is not penalized. OAT scores range from 200 to 400. A score of 300 usually indicates average performance on a national basis, though students are encouraged to find the average scores for matriculating classes at various schools to gain an idea of what may be considered a competitive score. Students are encouraged to take the OAT no later than Fall of the year preceding expected admission. The OAT can be taken multiple times. However, examinees must wait at least 90 days between testing dates. Scores from the four most recent attempts and the total number of attempts are reported. Complete information about the OAT can be found online at <https://www.ada.org/oat/index.html>.

Community Service/Volunteering/Shadowing: An integral part of preparation for optometry school entails involvement in community service projects and volunteer work in a hospital or clinical setting. These activities serve to familiarize prospective optometrists with the realities of everyday clinical practice as well as to underscore the role of optometry in relation to broader community level concerns and issues. A list of volunteer opportunities is available on the UHPO website (www.utsa.edu/healthprofessions), which we will continue to update additional possibilities. We do not, however, have a list available for shadowing experiences. Students must exercise personal initiative and develop relationships that would allow them to have this direct contact with an optometrist in everyday clinical practice.

Personal Statement: The UHPO staff will read and provide feedback to students regarding their personal statements given sufficient time, preferably two weeks prior to when comments are needed. We also recommend that students visit The Writing Center at UTSA (<http://www.utsa.edu/twc/>) for further review.

Letters of Evaluation: Letters of evaluation are an essential part of the application to optometry school. Because selection committees depend heavily on evaluation letters to gain insight into applicants' personal strengths, weaknesses, and accomplishments, students should be sure to request letters of evaluation from individuals, such as professors, work supervisors, and volunteer supervisors, who know them well. Approximately three to five letters can be useful. Letters from family members or other individuals whom students know only on a personal level are inappropriate.

The UHPO can both collect and send letters of evaluation on a student's behalf. To authorize the UHPO to do this, a student must meet with an advisor during a Pre-Committee Assessment appointment and sign a release form. The release form will indicate if a student will waive their right of access to the letters. We recommend that they do. A student using this service should provide all referees with copies of his or her release form and notify referees that their letters should be signed, printed on professional letterhead, accompanied by an OptomCAS rating form, and sent directly to the UHPO via campus or postal mail.

The UH College of Optometry specifically requires three letters of evaluation, but will accept up to four. Two of the three letters must be from faculty members familiar with the applicant's academic work. It is recommended that the final letter be another academic letter or a letter from an optometrist with whom the applicant has volunteered, worked, or shadowed. All letters must be submitted by the students' letter writers or the UHPO directly to OptomCAS.



UTSA Health Professions Committee Letter of Evaluation: The committee letter of evaluation is a form of support and advocacy that is meant to capture aspects of a student's life, personality, and background that are not found in other parts of his or her application. It will be written by an advisor, reviewed by other committee members, and submitted to OptomCAS and/or optometry schools along with other letters of evaluation by the UHPO. To request a committee letter of evaluation, a student must meet with an advisor during a Pre-Committee Assessment appointment to discuss his or her pre-optometry preparation and to learn about all requirements for the committee process. Committee interviews, one of the requirements of the committee process, are typically only offered between March 1 and September 1 each year. However, depending on a student's application timeline for optometry school, interviews may be requested during other times of the year.

Interviews: The UHPO can offer some advice as students prepare for interviews and, after interviews, would like to debrief with students about their impressions. The University Career Center also facilitates interview workshops and conducts mock interviews to provide students with feedback. For more information about their services, contact them at the Main Campus [UC 2.02.04 or (210) 458-4589] or Downtown Campus [BV 1.304 or (210) 458-2910].

Additional Resources: The UHPO keeps and maintains resources that will be available to students in our office. These include books, journals, handouts, and other resources. Useful information about optometry programs and the profession can be found on the websites of the Association of Schools and Colleges of Optometry (<http://www.opted.org/i4a/pages/index.cfm?pageid=1>), the American Optometric Association (<http://www.aoa.org/>), and the American Academy of Optometry (<http://www.aaopt.org/>). For more information specific to the University of Houston College of Optometry, students are encouraged to visit their website at <http://www.opt.uh.edu> or to call their Office of Student Affairs and Admissions at osa@optometry.uh.edu or (713)-743-2040.

Health Professions Advising: The UHPO provides advising and support to students interested in pursuing careers in the health professions, including optometry. This consists of academic preparation assistance as well as information about health careers, application procedures, and entrance exams for undergraduates, post-baccalaureate students, non-degree seeking students, and alumni. Students are encouraged to seek advice and consult with the UHPO advising staff early in their college career. For more information about our appointment and walk-in schedules and our other services, please contact us:

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