

PRE-OPTOMETRY G U I D E



Optometrists examine the eyes and other parts of the body related to vision. They also diagnose, treat, and manage diseases, injuries, and other disorders of the eyes. They prescribe eyeglasses or contact lenses as needed. Optometrists typically do the following:

- Perform vision tests to check for sight problems, such as nearsightedness or farsightedness
- Check for eye diseases, such as glaucoma
- Prescribe eyeglasses, contact lenses, and medications
- Provide other treatments, such as vision therapy or low-vision rehabilitation
- Provide pre- and postoperative care to patients undergoing eye surgery—for example, examining a patient's eyes the day after surgery
- Evaluate patients for the presence of diseases such as diabetes and refer them to other health care providers as needed
- Promote eye health by counseling patients, including explaining how to clean and wear contact lenses

Some optometrists spend much of their time providing specialized care, particularly if they are working in a group practice with other optometrists or doctors. For example, some optometrists mostly treat patients with only partial or no sight, a condition known as low vision. Others may focus on pre or postoperative care if they work in a facility that does many eye surgeries. Optometrists may also teach or do research in optometry colleges or work as consultants in the eye care industry.

Many optometrists own their practice and may spend more time on general business activities such as hiring employees and ordering supplies. Optometrists should not be confused with ophthalmologists and with dispensing opticians. Ophthalmologists are physicians who perform eye surgery and treat eye disease in addition to examining eyes and prescribing eyeglasses and contact lenses. Dispensing opticians fit and adjust eyeglasses and in some states fill contact lens prescriptions that an optometrist or ophthalmologist has written. (Occupational Outlook Handbook)

A minimum of 90 semester hours are required for admission at most optometry schools. However, the majority of students entering optometry school have a baccalaureate degree. Therefore, students pursuing a pre-optometry curriculum are expected to choose a major so that they can be working towards a baccalaureate degree concurrently with the pre-optometry program. This requires a major/minor combination or a comprehensive major as well as completion of the UNK general studies requirements and other degree requirements as set forth in the college catalog. Optometry schools do not specify which major a student should pursue in conjunction with his/her pre-optometry studies. **Gaining acceptance into a optometry school is a very competitive process.**Completion of the pre-requisite courses does not automatically guarantee admission.

Students should check with the specific school(s) to which they intend to apply to ensure that all requirements are fulfilled as requirements for admission vary.

1. Required Courses

Take all of the following:

BIOL 106	Biology II	4		
BIOL 211	Human Microbiology	4		
BIOL 225	Anatomy and Physiology	4		
BIOL 226	Anatomy and Physiology	4		
CHEM 160	General Chemistry	4		
CHEM 161	General Chemistry	4		
CHEM 351	Biochemistry	4		
MATH 102**	College Algebra	3		
MATH 103**	Plane Trigonometry	3		
MATH 115	Calculus I with Analytical Geometry	5		
STAT 241	Elementary Statistics	5 3		
PHYS 205	General Physics	5		
PHYS 206	General Physics	5		
PSY 203	General Psychology	3		
ENG 101	Introduction to Academic Writing	3		
ENG 102	Academic Writing and Research	3		
Take one of the following options:				
CHEM 250	Elementary Organic Chemistry	5		
OR take two classes:				
CHEM 360	Organic Chemistry	5		
CHEM 361	Organic Chemistry	5		
2. Strongly recommended:				
NUTR 108	Introduction to Nutrition	3		
BIOL 309	Cellular & Molecular Biology	4		
BIOL 360	Genetics	4		
BIOL 401	Principles of Immunology	4		
BIOL 465	Physiology	3		
DIOL 403	THYSIOLOGY	J		

^{**}Students with sufficient math preparation may enter the mathematics portion at a higher level.

Academic Guidelines

An overall GPA of 3.5 or above (on a 4.0 scale) is preferred; however, a higher GPA is preferred and will result in the student being a more competitive applicant. Each required course must be passed with a grade of "C" or better. A grade of "C-" will not be accepted. Students searching for electives outside their major requirements should consider courses from the following areas: biology, chemistry, mathematics, sociology, psychology, business administration, healthcare management, and healthcare economics. See your advisor for suggestions. Students should be aware of prerequisites on all courses and plan their coursework accordingly.

Non-Academic Guidelines

There is no magic formula for acceptance into professional school. Admission is based on GPA, test scores, shadowing and medical experiences, community involvement and volunteerism, leadership qualities, the interview, the essay, and letters of recommendation. Shadowing and medical experiences are of utmost importance. Students should plan to shadow a minimum of 40 hours in their selected profession. Health Sciences offers opportunities to meet these non-academic guidelines through the Shadowing Program, the Health Science Club, and volunteer experiences. Research experience is not required, but will be looked upon favorably. Students should plan to be involved in these types of activities and experiences throughout their undergraduate career. Other important non-academic factors include good moral character, excellent interpersonal skills, a deep commitment to healthcare, evidence of leadership potential and service to others.

The Application Process

Students will make application to most optometry schools through a centralized application service called the Optometry Centralized Application Service (OptomCAS). The application and further information may be accessed at www.optomcas.org. The centralized application service allows students to fill out one application to apply to multiple schools. The application comes open in summer and early application is strongly encouraged. Students should make application in the summer or early fall of the calendar year proceeding the year in which they hope to enroll in professional school. Applicants should not wait for OAT

scores, transcripts, or other application materials before applying through OptomCAS. Check with the schools to which you are applying to verify their policies and procedures regarding supplemental applications.

Entrance Examination Requirement (OAT)

Most U.S. optometry schools require applicants to take the Optometry Admission Test (OAT). Many programs will accept other standardized exams such as the MCAT, DAT, or GRE. It is preferred that the OAT, or alternative test, is taken no later than August of the calendar year preceding the year in which the applicant wishes to enroll in an optometry program. The test consists of four sections: Survey of the Natural Sciences (Biology, General Chemistry, and Organic Chemistry), Reading Comprehension, Physics and Quantitative Reasoning. To aid in OAT preparation, Health Sciences offers a Test Prep Review Program every spring semester. For more information, please contact Health Sciences.

Letters of Evaluation/Recommendation

Letters of evaluation will be required of applicants. Letters from a faculty member, optometrist, academic advisor, or employer would be appropriate. Information about the non-academic character of a student would be most useful as academic information is already in the application. Letters should be submitted directly to OptomCAS.

Interviews

Most schools screen applicants with some form of personal interview. The format of the interview may vary depending on the schools to which students are applying.

Criminal Background Checks

Prerequisite for enrollment into any health science professional program is consent for an external background check. This check includes, but is not limited to, past criminal offenses and registry information. If there is evidence of arrest for a crime(s), conviction for a crime(s), presence on an abuse registry, or other information which reasonably suggests that patient safety might be compromised, the student will be asked to provide additional information.

Citizenship/International Students

Professional schools in the health sciences vary as to whether they accept non-U.S. citizens. Some schools that do accept non-citizens require a substantial financial commitment up front. Since not all schools accept non-citizens and since the financial commitment of those that do may be substantial, students should thoroughly research and carefully consider such a decision and discuss it with their pre-health advisors early in their undergraduate years.

Websites

Association of Schools & Colleges of Optometry UNK Health Sciences

www.opted.org www.unk.edu/healthsciences

Suggested Sequence of Key Courses

	Fall	Spring
Year 1	CHEM 160 BIOL 106 MATH: See advisor for appropriate course placement.	CHEM 161 BIOL 211
Year 2	CHEM 360 or CHEM 250 BIOL 225	CHEM 351 or CHEM 361 BIOL 226
Year 3	PHYS 205 CHEM 351	PHYS 206 Register to take the OAT in late spring or summer. Complete optometry school application in the summer.
Year 4	Complete final major courses.	Complete final major courses.

- A MATH ACT score of 22 or prior completion of College Algebra (MATH 102) or higher is a pre-requisite for CHEM 160.
- A minimum MATH ACT score of 20 or prior completion of College Algebra (MATH 102) (Grade of B+ or better) or higher is required for entry into PHYS 205.
- The courses suggested above should be completed prior to taking the OAT.
- It is not recommended to take any of the above science courses during a summer session, especially if the material will be covered on the OAT.

Students who are accepted into optometry school prior to completing a baccalaureate degree at UNK may be eligible to receive a Bachelor of Science degree in Applied Health Sciences if they have completed all General Studies requirements and have at least 85 semester hours completed in pre-optometry studies.