THE UNIVERSITY OF IOWA

ACADEMIC ADVISING CENTER

Pre-Optometry Guide
2021-2022

Optometrists, also known as *Doctors of Optometry,* or *ODs*, are the main providers of vision care. ODs examine people's eyes to diagnose vision problems such as nearsightedness and farsightedness. They test patients' depth and color perception and ability to focus and coordinate the eyes. ODs prescribe eyeglasses or contact lenses. They provide treatments such as vision therapy or low-vision rehabilitation. ODs also diagnose conditions caused by systemic diseases such as diabetes and high blood pressure, referring patients to other health practitioners as needed.

Most optometrists are in general practice. Some specialize in work with the elderly, children, or partially sighted persons who need specialized visual devices. The State of Iowa does not have a college of optometry; as a result, University of Iowa pre-optometry students apply to one or more of the 23 colleges of optometry located in the United States (six are in the Midwest). You can review optometry schools and programs at this website:
https://optometriceducation.org/students-future-students/member-schools-and-colleges/

As Pre-Optometry advisors, we strive to guide you to the best of our abilities, but it is important to know that optometry programs are not standardized. From the beginning, you are encouraged to research possible programs of interest to identify discrepancies in pre-requisite and other requirements between schools of optometry. It is important for you to be proactive in cross-referencing required prerequisite coursework. Consult with your academic advisor regarding specific program requirements.

Sample Pre-Optometry Four-Year Academic Plans

Plan A: Starting with General Chemistry and Pre-Calculus

Year 1:		
CHEM:1070 General Chemistry I	CHEM:1110 Principles of Chem. I	
Math through Trig. Or Pre-Calculus*	MATH:1460 Calculus for Biological Sciences*	
	PSY:1001 Elementary Psychology**	
Year 2:		
CHEM:1120 Principles of Chem. II	CHEM:2210 Organic Chemistry	
BIOL:1411 Foundations of Biology	BIOL:1412 Diversity of Form and Function	
Statistics (STAT:3510 or STAT:4143)	ENGLISH LITERATURE COURSE**	
	(Beyond ENGL:1200 and RHETORIC)	
Year 3:		
PHYS:1511 Col. Physics I	PHYS:1512 Col. Physics II	Summer: Apply to
CHEM:2220 Org. Chemistry II**	CHEM:2410 Org. Chem. Lab**	optometry school
HHP:2400 Human Physiology**	Microbiology course	late summer/
	Take OAT in spring or summer	early fall
Year 4:		
Anatomy course**	Biochemistry course**	
Courses to complete major	Courses to complete major	

Plan B: Starting with Principles of Chemistry and Calculus

Year 1:		
CHEM:1110 Principles of Chem. I	CHEM:1120 Principles of Chemistry II	
MATH:1460 Calc. for Biological Sciences*	BIOL:1411 Foundations of Biology	
or MATH:1850 Calculus I*	PSY:1001 Elementary Psychology**	
Year 2:		
BIOL:1412 Div. of Form & Function	CHEM:2220 Organic Chemistry II**	
CHEM:2210 Organic Chemistry I	CHEM:2410 Organic Chem. Lab**	
Statistics (STAT:3510 or STAT:4143)	ENGLISH LITERATURE COURSE** (Beyond ENGL:1200 and RHETORIC)	
Year 3:		
PHYS:1511 Col. Physics I	PHYS:1512 Col. Physics II	Summer: Apply to optometry school late summer/early fall
HHP:2400 Human Physiology course**	Microbiology course	
	Take **OAT** in spring or summer	
Year 4:		
Anatomy course**	Biochemistry course**	
Courses to complete major	Courses to complete major	

*Minimum **requirements** for admission to all optometry schools are **one year** each of biology or zoology, chemistry, physics, and English; and a college math course (most schools require one semester of calculus). Program requirements vary. Check additional information about prerequisites: www.opted.org or https://optometriceducation.org/wp-content/uploads/2021/06/ASCO-Prerequisites.2-2021-updated-6-21-21.pdf

** These are **recommended** courses (and required at some schools; see school websites above for details).

Academic Guidelines

OptomCAS calculates a standardized GPA to aid the schools and colleges of optometry in evaluating applicants using uniform and consistent criteria. For optometry schools nationwide, the fall 2020-2021 cumulative average GPA for the entering classes was 3.46. Some schools require at least a "C" in each of the prerequisite courses (see prerequisite list at the end of this Guide). Students whose academic record falls significantly below the averages are unlikely to be accepted to optometry school. A bachelor's degree is not required at most optometry schools, but is typically preferred, and most students will have a bachelor's degree prior to entry. (Of all applicants in the United States in 2020, 100% of those admitted to programs had a bachelor's degree.) A profile of the 2020-2021 Optometry entering classes may be found here: https://optometriceducation.org/student-profile-prerequisites/profiles-of-the-entering-classes

Non-Academic Guidelines

Important non-academic factors include good moral character, excellent interpersonal skills, a deep commitment to optometric health care, evidence of leadership potential, and service to others. Most optometry schools want evidence of a candidate's exposure to the field of optometry. Successful applicants will likely have worked, or volunteered, in an optometrist's office. Students are encouraged to investigate opportunities for working/volunteering in such a setting early in their undergraduate years.

The Application Process

The centralized application service, OptomCAS, enables students to apply to multiple schools with a single application. Candidates should check with their pre-optometry advisors for the most recent

information. The 2019-2020 OptomCAS application cycle opened on June 27 and is similar each year. Applications should be submitted in the year preceding the year for which a student is seeking admission. Since many optometry schools have rolling admission, **it is in a student's best interest to apply early** (in late summer or early September). Application deadlines vary; check the student profile section of www.opted.org, as noted above, for deadlines at individual schools.

Early Entry/Early Admission
Some optometry programs accept students for entry after 90 semester hours of undergraduate coursework. Students entering at 90 semester hours are typically very strong academically and extremely well prepared. Most programs prefer a bachelor's degree, and several require one. Students may check the ASCO website for preferences at schools in which they are interested. Additionally, a few schools have an early admission (or early decision) cycle for well-qualified applicants. This cycle typically begins in the fall or early spring of the year **before** matriculation. Grade point averages are usually higher (3.5 to 3.6) for successful students in early admission. Be sure to check about early admission policies at all programs where you apply.

Diversity in Optometry
ASCO and its member institutions have embraced the concepts of diversity and multiculturalism in optometric education and in the profession. ASCO bases its diversity program on several assumptions including greater diversity among health professionals, improved access to care for our diverse society, greater patient choice and satisfaction, better patient-provider communication, and better educational experiences for all students. In the 2019-2020 application cycle, the percentage of students who identify as Black or African American was 5.46%; the percentage of students who identify as Hispanic or Latino was 11.08%; the percentage of students who identify as Asian was 30.47%; the percentage of students who identify as Caucasian was 47.56%; the percentage of American Indian/Alaska Native was .23%; the percentage of students who identify as two or more races was 3%. In 2019-2020, the gender ratio was 1,830 women : 732 men.

Entrance Examination Requirement (OAT)
The Optometry Admission Test (OAT) is required for admission to all colleges of optometry in the United States. The OAT is a standardized, computer-based exam that consists of four tests: Survey of the Natural Sciences (Biology, General Chemistry, and Organic Chemistry); Reading Comprehension; Physics; and Quantitative Reasoning. The scoring range is from 200 to 400 with the mean score assigned to 300. Students typically take the OAT after courses in mathematics, biology, general chemistry, organic chemistry, and physics. In addition, students prepare by self-study using online or OAT study guide materials (available at major bookstores) or by participating in a formal OAT test preparation course. A candidate may retake the OAT but only after a 90-day waiting period. You may read about OAT test preparation at the following website: https://www.ada.org/en/oat/test-preparation.

Letters of Evaluation/Recommendation
Applicants typically obtain letters from science faculty members, faculty members from their major department, and optometrists. **At least one letter from a practicing optometrist is required as part of the application at some schools.** The mix of required letters varies by school; students should check the specific requirements for each optometry school to which they wish to apply**.** UI does not have a committee process for letters of evaluation. Instead, students request letters from their individual evaluators.

Interviews
Optometry schools often require personal, on-campus interviews. Selected candidates will be contacted to arrange an interview. The interview is an important part of the selection process, and candidates should prepare well for the interview. Web-based virtual practice interviews are available through the UI Career Center in C310 Pomerantz Center.

Criminal Background Checks
The issue of criminal background checks (CBCs) for students applying to optometry school is rapidly changing. Students should check with the individual optometry schools for information about whether a CBC is required. Certain hospitals and optometric placements will require a CBC, regardless of whether an individual school requires one. Students should be law-abiding and make ethical decisions since charges or convictions often have later negative consequences.

Citizenship/International Students
Some optometry schools accept students who are not U.S. citizens. Fluency in the English language may be important. Some schools require a financial affidavit confirming sufficient financial resources. Students should carefully consider such a decision and explore the options with the individual optometry schools, and their pre-optometry advisors, early in their undergraduate years.

Websites
Association of Schools and Colleges of Optometry (ASCO): www.opted.org
American Optometric Association: www.aoa.org

Pre-Optometry Coursework Checklist & Minimum Requirements at Most Optometry Schools

____MATH:1460 Calc. for Bio. Sci. **or**
____MATH:1850 Calculus I

____Statistics (STAT:3510 **or** 4143)

____BIOL:1411 Foundations of Biology
____BIOL:1412 Diversity of Form & Function
____Microbiology (MICR: 3164 **or** 2157)

____CHEM:1110 Principles of Chem. I
____CHEM:1120 Principles of Chem. II

____CHEM:2210 Organic Chemistry I
(Most schools require an organic lab.)
____ ENGLISH LITERATURE COURSE**
(Beyond ENGL:1200 and RHETORIC)

One year of physics **
____PHYS:1511 Col. Physics I **or** ____PHYS:1512 Col. Physics II
___ PHYS:1611 Intro. Physics I **or** ___PHYS:1612 Intro. Physics II
___PHYS:1701 Physics I ___ PHYS:1702 Physics II

**Most students enroll in the PHYS:1511-1512 sequence. The calculus-based sequences PHYS 1611-1612 or PHYS:1701-1702 (physics majors only) are also possible. See your advisor for help in choosing the appropriate sequence for your major.

___English course (RHET:1030) ___English course (ENGL:1200) ___Psych. Course (PSY:1001)

Additional Recommendations (see the ASCO website above for individual programs):
____Anatomy (ACB:3110 or ANAT:1100)
____Biochemistry (BIOC:3110)
____Physiology (HHP:3500)
_____Organic Chemistry II (CHEM:2220)
_____Organic Chemistry Lab (CHEM:2410)
_____Additional Psych. (2701,2301,2401,2501,2601,2915,2930, etc.)