

ASU Caduceus News



Spotlight On: Optometry

Each week we will be spotlighting a different health profession. In addition, we will also put out editions focusing on common questions like, should I be an MD/DO or a PA? Today's spotlight is on Optometry. If you have a health profession or question you think should be addressed, feel free to email us and let us know at prehealthtempe@asu.edu

What is Optometry?

Doctors of Optometry (OD) are the independent primary health professionals for the eye. Optometrists examine, diagnose, treat, and manage diseases, injuries, and disorders of the visual system, the eye, and associated structures as well as identify related systemic conditions affecting the eye (American Optometric Association [AOA]).

OD's are viewed increasingly as primary care providers for patients seeking ocular or visual care. The career of Optometry has expanded throughout the years and goes far beyond just prescribing and fitting glasses and contact lenses. Optometrists are trained to evaluate any patient's visual condition and to determine the best course of treatment for that condition. More information about the role of an Optometrist will be provided at the end.

Pros and Cons of a Career in Optometry:

Pros

- Good work/life balance - most optometrists work between 40-50 hours per week. Some night and weekend work may be required, but it is rare to be on-call or be called in for an emergency after hours
- Comfortable work environment - optometrists have little exposure to bodily fluids or highly contagious microbes
- High interaction with patients - exams will last 15-30 minutes and many patients will see their optometrist 1x per year meaning you can create long-term relationships
- Routine and pathological cases - routine refraction exams are the bulk of an

optometrists' work, but pathologies manifesting in the eye are common enough to make the day-to-day interesting. Ocular manifestations of diabetes, eye infections, keratoconjunctivitis sicca, glaucoma, among others are some of the most common medical cases that optometrists see

- Gateway to healthcare - optometrists are often the first to diagnose patients with underlying systemic diseases, such as diabetes, hypertension, or high cholesterol. In response, optometrists refer the patient to a primary care physician, serving as a first line of defense in today's health care team. (Recently, there has been some research suggesting that Alzheimer's disease may soon be diagnosed by a retinal exam.)
- Immediate, tangible results - optometrists can see the excitement on a patient's face when they give them the gift of clear vision
- Technology - optometrists get to work with lasers and other technology to help diagnose and treat patients

Cons

- Very retail oriented - although optometrists can open their own practice, these days most jobs in optometry come from major corporations and retail locations. Students should keep this in mind when considering whether optometry is a good fit.
- News/Diagnosis is not always good - many diseases have some manifestation in the eye, meaning optometrists will often make an initial diagnosis and refer to a physician for a follow-up. Unfortunately, it is rare that the discovery is good news. Having the communication skills to relay this information to the patient takes skill
- Insurance - dealing with insurance is a common trait throughout the healthcare field. Optometrists work with the patient and their insurance to come up with a plan of action - what they want to do is not always possible given insurance or barriers from the patient.
- Tuition/Salary - optometry school has high tuition when compared to the average salary
- Difficult patients - while many optometrists have good relationships with their patients, not all patients are easy. Some may dismiss you or not be happy about seeing you. You don't necessarily get to pick your patients, so it's important to see the full scope prior to entering the profession

Pre-Optometry Requirements

Students planning to enter optometry school should focus on academic and non-academic factors prior to application.

Academics:

All optometry schools require you to complete prerequisite coursework prior to admission. Many of these courses provide content which will be tested on the OAT and serve as the foundation for your graduate basic health sciences during the first two years of optometry school.

Prerequisite Chart

Letters of Recommendation:

Optometry schools will require you to submit letters of recommendation along with your application. Letters should come primarily from academic science professors you've had in a classroom setting. Students may also consider an optometrist and a research PI/mentor as additional letters. You should be introducing yourself to faculty members and engaging throughout the semester to build a good working relationship prior to asking for a letter. Coming from a large university with large classes will not absolve you from needing letters. Letters are an important component to your application and are reviewed prior to admitting you to an optometry program.

Non-Academics:

Exposure to the field of optometry is essential to articulating why you are interested in entering the profession. Students should aim to spend time shadowing, volunteering, or working in settings with optometrists throughout their time as an ASU student. While there is no minimum number of hours students should complete, the more exposure you gain the better understanding you will have of the pros and cons to entering the profession.

Students should also plan to engage outside the classroom through internships, volunteer work, student employment, part/full-time employment, and/or research. What you choose to do with your time will help schools build a picture of who you are, what your interests are, and what responsibilities you had in addition to being a student. There is no preference for students to engage in one type of activity over another.

Pre-Optometry Club

Pre-Optometry Summer Programs

- AZPOP - Arizona Pre-Optometry Program at Midwestern University
- OptoCamp - Optometry Camp at UC-Berkeley

Optometry School

There are **23** schools of optometry in the US and students typically apply to 5-8 schools

There is one optometry school in Arizona: Arizona College of Optometry, Midwestern University located in Glendale, Arizona. This is a private institution and has no residency preference, however, ASU students who meet minimum entrance requirements will be given a preferential interview.

Optometry school is 4 years

- The first two years consist of basic health science classroom learning - classes in

biochemistry, genetics, immunology, histology, and more are taken. Students will also have the opportunity to gain clinical exposure in a simulation lab where you will work with your fellow classmates serving as patients.

- Your third year will blend additional classroom sciences with real-world clinical practice.
- Fourth year students engage almost entirely in clinical practice with the opportunity to complete external rotations. External rotations range from 8-16 weeks.

In order to practice as an optometrist, you must complete your degree and pass the licensing exam. The licensing exam consists of written and clinical portions - students will complete the written portions during OD school.

Average GPA for accepted students: 3.44

Optometry Outlook

Optometry is a growing profession, expected to grow nearly 10% in the next 10 years. As current optometrists retire and our population gets older, the need for optometrists is expected to increase. Some cities and regions are more saturated with optometrists than others.

Compensation: The mean salary for optometrists is currently \$112,000 and the median salary is \$115,000.

OAT Prep: Average \$500, but can increase to over \$1000

Optomcas Application: \$180 + \$70 per additional school

- Average: \$600

Fee Assistance: No

Secondary Applications: Varies, \$0-75

Interviews: Varies

Average Application Costs: \$2,500

Average Tuition at Optometry School: \$48,000

Average Debt from Optometry School: \$225,000

Cost is a major factor when considering any type of professional healthcare degree. Many optometrists will encourage you to determine whether you really love the profession before committing. This is also one reason optometry schools will encourage or require shadowing or other experience in optometry prior to applying. Optometry is a rewarding career with many options and opportunities, but so students who are passionate about the eye should not let the prospect of high debt scare them away. There are many options for paying down debt and most OD's are able to do so comfortably, though payoff may take as many as 20-years.

Videos and resources for more information:

[ASCO YouTube Channel](#)

[Explore Health Careers: Optometry](#)

[Association of Schools and Colleges of Optometry](#)

[American Optometric Association](#)

An overview of the role and conditions cared for by an OD

- Corneal abrasions, ulcers, or infections; glaucoma; and other eye diseases that require treatment with pharmaceutical agents, management, and referral when necessary
- Visual skill problems such as the inability to move, align, fixate, and focus the ocular mechanism in such tasks as reading, driving, computer use, and in tasks related to hobbies and employment
- The inability to properly process and interpret information requiring perception, visualization, and retention such as that needed for most learning tasks
- Poor vision–body coordination when one interacts with the environment, as in sports, occupations, and other everyday activities requiring spatial judgments; and
- Clarity problems such as simple nearsightedness or farsightedness or complications due to the aging process, disease, accident, or malfunction
- Diagnose, manage, and refer systemic diseases such as hypertension, diabetes, and others that are often first detected in the eye
- Provide presurgical and postsurgical care of cataracts, refractive laser treatment, retinal problems, and other conditions that require presurgical and postsurgical care
- Encourage preventative measures such as monitoring infants' and children's visual development, evaluating job/school/hobby–related tasks, and promoting nutrition and hygiene education.

Note: Optometrists should not be confused with ophthalmologists or dispensing opticians. Ophthalmologists are physicians who perform eye surgery, in addition to diagnosing and treating eye conditions. Dispensing opticians fit eyeglasses and contact lenses, following prescriptions written by ophthalmologists or optometrists.

