Optometry (O.D.)

Career Description

- Doctors of Optometry examine, diagnose, treat and manage diseases and disorders of the visual system and eye.
- ODs may be the first to recognize systemic diseases in their patients such as diabetes or high blood pressure.
- Besides routine eye exams and fitting patients for corrective lenses, optometrists treat many other eye problems including glaucoma and visual skill problems such as the inability to move, fixate and focus the eye.
- Technological advances in eye care mean Optometrists are on the cutting edge of technology. For example, nearly 90% help manage patients who have had refractive (laser) eye surgery as well as cataract and retinal treatments.
- Although the majority of optometrists practice primary care optometry, some specialize in particular populations or treatments including pediatrics, low vision rehabilitation, sports vision, learning disabilities, and head trauma.
- Optometrists collaborate with Ophthalmologists who are physicians (MDs or DOs) who perform eye surgery as well as diagnose and treat eye diseases and injuries.
- Optometrists also encourage preventive measures such as monitoring children's vision, evaluating school vision, and promoting nutrition and hygiene education.

Becoming an Optometrist

- Generally schools require at least two or more years of undergraduate work (90 credit hours). The preference, however, is for students with a bachelor's degree.
- Optometry school is a four year program. The first two years are largely science based and the third and fourth year are spent mostly in clinical settings. After successful completion of the 4 years, students graduate with an O.D. (Doctor of Optometry).
- A licensure exam is required.

Prerequisite Courses

- Prerequisite courses vary between programs. When narrowing choices of schools, pay special attention to their particular requirements.
- Programs may require or recommend biochemistry, and behavioral science (psychology, sociology, cultural anthropology).
- All required courses must have a minimum C grade.
- Additional information on each college's requirements and student profiles can be found on the Association of Schools and Colleges of Optometry website (link shown below).

Common Prerequisite Courses (pre-reqs determined by each optometry school but similar to this list)

Requirement	Purdue Equivalents (specific courses may vary by major)
General Biology with lab	BIOL 11000-11100 **or** BIOL 13100 **&** 23100 **&** 23200 (lab)
Anatomy & Physiology	BIOL 20300-20400 **or** BIOL 30100-30200
Microbiology with lab	BIOL 22100 **or** BIOL 43800
General Chemistry with lab	CHM 11500-11600 **or** CHM 12500-12600 **or** CHM 12901 *(CHM 11500 Credit Exam recommended along with CHM 12901)*
Organic Chemistry with lab (some schools require 2 semesters/some require only one semester)	CHM 25700 **or** CHM 25500-25600 **or** CHM 26100-26200 **or** CHM 26505-26605 **or** MCMP 20400-20500
Biochemistry	CHM 33300 **or** 33900 **or** 53300 **or** BCHM 30700 **or** 56100 **or** MCMP 20800
Physics with lab	PHYS 22000-22100 **or** 23300-23400 **or** PHYS 17200 **&** 27200 **or** PHYS 17200 **&** 24100* (may need 1 hr lab such as PHYS 25200)
English	ENGL 10600 **or** ENGL 10800 **and** another English course with strong writing component (either writing or literature)
Psychology	PSY 12000
Calculus	MA 16100 **or** MA 22300 & MA 22400
Statistics	STAT 30100 **or** 50300, some schools will accept PSY 20100 or SOC 38200
Pre-Med Planning Seminar (Optional)	**BIOL 39600** is a 0 credit 10 week class covering how to apply to optometry school and other health professions programs

Job Outlook

- Currently there are approximately 40,600 Optometrists involved in direct patient care. In fact, about 70% of eye care is delivered by Optometrists.
- With an aging population and better reimbursement for eye care by many insurance plans, the market for optometric services is anticipated to increase.
- Optometrists practice in many settings including solo and group practices, as part of hospitals or HMOs, retail settings, veterans hospitals, research, industrial settings, and consulting.
- The average net income of optometrists in a 2014 American Optometric Association Survey was $122,667. The Bureau of Labor Statistics is expecting 27% job growth (much higher than average) through 2024.

Preparation

- Optometry programs look for well-rounded students who are strong in science and have good communication skills.
- Programs consider GPA as well as the score on the aptitude test, the Optometry Admissions Test (OAT).
- They also look for leadership, empathy, extracurricular and community activities, and observation experiences in optometric facilities.
- A list of all the programs and their prerequisite courses is available at http://www.opted.org/wp-content/uploads/2016/05/ASCO-Prerequisites-May-2016.pdf
- One source of information about the field is the Association of Schools and Colleges of Optometry Career Guide http://www.opted.org/wp-content/uploads/2016/03/ASCO-CareerGuide-2016-v3.pdf

Applying

- Application is made through an online application system called OptomCAS.
- Your letters of recommendation should be submitted by letter writers directly to OptomCAS.
- Your online application will include an essay explaining why you are interested in becoming an optometrist.
- The individual optometry programs will ask for supplementary information and will hopefully invite you to their campus for an interview.
- Early application is essential.

More Information

- Association of Schools and Colleges of Optometry http://www.opted.org
- Information on the Optometry Admissions Test (OAT) http://www.ada.org/en/oat/
- OptomCAS http://optomcas.org
- American Optometric Association http://www.aoa.org

Programs

- Indiana University School of Optometry Bloomington, IN http://www.opt.indiana.edu/
- Illinois College of Optometry Chicago, IL http://www.ico.edu/

Information for this career guide came from the above websites, the Bureau of Labor Statistics http://www.bls.gov/ooh/healthcare/optometrists.htm, Explore Health Careers http://www.explorehealthcareers.org, and those of individual schools.

PURDUE CCO
PRE-PROFESSIONAL ADVISING

Purdue University ▪ Center for Career Opportunities ▪ Pre-Professional Advising
132 Young Hall ▪ 765-496-2690 ▪ preprofessional@purdue.edu ▪ www.purdue.edu/preprofessional