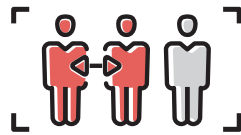


# DOCTORS OF OPTOMETRY ARE AMERICA'S PRIMARY EYE CARE PROVIDERS

Doctors of optometry deliver an essential component of patients' overall primary health care. During a comprehensive eye exam, doctors of optometry not only determine eye and vision health, but also can identify early warning signs and manifestations of systemic diseases including diabetes, hypertension and cancer.



**\$139 billion** - the economic burden of eye diseases, vision loss, and eye disorders in the U.S.

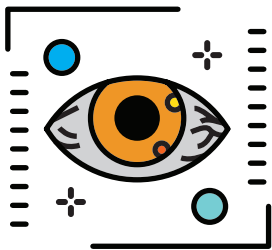


Doctors of optometry provide **more than two-thirds of primary eye health care in America** and more than 99 percent of the U.S. population lives in counties with an eye doctor.



**Optometry has greater geographic distribution** and is more accessible than other eye care professions

## OPTOMETRISTS PROVIDE HIGHLY SPECIALIZED EYE CARE SERVICES, INCLUDING:



- Deliver vision services such as comprehensive eye examinations, treatment of eye conditions such as amblyopia (lazy eye) and strabismus (crossed eyes)
- Diagnose eye conditions such as macular degeneration, glaucoma, diabetic retinopathy, conjunctivitis, and more
- Prescribe medications for specific eye conditions (allowed in most states)
- Prevention of eye disease and eye injury services
- Prescribe and fit eye glasses and contact lenses
- Provide pre-operative and postoperative care for patients before and after eye surgery

## EDUCATION AND TRAINING

Optometrists are licensed doctors who are held to the same legal standard as physicians. Becoming a doctor of optometry requires an extensive undergraduate and professional medical education. However, unlike MDs, doctors of optometry focus their entire education exclusively on the study of eye health and vision care.



After undergraduate college training, the **post-graduate, doctoral-level degree program in optometry** is comprised of an additional four years of extensive classroom, laboratory, and clinical training at an accredited optometry school.



This education combines **all phases of functional eye health care and optics with the health sciences** in a unified, specialized program.



**Post-graduate clinical residency programs** are available for optometrists who wish to specialize in family practice optometry, pediatric optometry, geriatric optometry, vision therapy, contact lenses, hospital-based optometry, primary care optometry, or ocular disease.



In addition to their formal training, **all 50 states and the District of Columbia require doctors of optometry to participate in ongoing continuing education courses** to stay current on the latest standards of care and to be eligible for license renewal.

## GENERAL OPTOMETRY SCHOOL CURRICULUM

Doctors of optometry focus their entire education on eye health. The four-year optometry curriculum includes contact lenses, optics, vision sciences, sensory processing, vision therapy, practice management, and courses related to basic medical sciences and eye diseases.

### YEAR 1

- Human Anatomy
- Human Physiology & Pathology I, II and III
- Geometric & Theoretical Optics I and II
- Biochemistry I and II
- Clinical Methods and Procedures I, II and II
- Microscopic Anatomy
- Applied Ocular Anatomy
- Clinical Assistant Program (Primary Eyecare) I and II
- Neuroanatomy & Neurophysiology
- Vision Science I
- Visual and Physical Optics
- Practice Management I

### YEAR 2

- Vision Science II
- Color Vision
- General Pharmacology
- Ocular Physiology
- Patient Care Program (Primary Eyecare) I, II, and II
- Clinical Methods and Procedures IV
- Ophthalmic Optics I & II
- Introduction to Binocular Anomalies
- Binocular Vision
- Ocular Motility
- General and Ocular Pharmacology
- Anterior Segment I and II
- Glaucoma/ Neuro-Eye I and II
- Eyewear Center I and II
- Clinical Methods and Procedures Seminar
- Ocular Pharmacology and Therapeutics
- Developmental Vision and Neurobiology
- Microbiology
- Practice Management II
- Contact Lenses I
- Vision Rehabilitation

### YEAR 3

- Evidence Based Health Care
- Glaucoma/ Neuro Eye III and IV
- Specialty Rotation (Advanced Eyecare)
- Special Rotation (Vision Rehabilitation)
- Specialty Rotation (Pediatrics/ Binocular Vision)
- Specialty Rotation (Cornea/ Contact Lens)
- Patient Care Program (Primary Eyecare) IV, V, VI, and VII
- Community-Based Patient Care (CPS)
- Eyewear Center II
- Contact Lenses II
- Infant/ Child Development and Management
- Clinical Medicine I and II
- Retina I and II
- Binocular Vision Disorders
- General & Ocular Emergencies
- Ocular Disease Seminar
- Strabismus and Amblyopia, I and II
- Injections and Minor Surgical Procedures
- Business of Optometry
- Ophthalmic Lasers
- Practice Management III

### YEAR 4

- Externship Rotations (20 CR hrs each):
- Eye Institute Patient Care Rotation
- VA/ Hospital Based Externship Rotation
- Specialty Externship Rotation
- Specialty Externship Rotation

## U.S. MEDICAL SCHOOL CURRICULUM

By comparison, in the traditional medical school model, MDs study diseases, as well as the science and the normal functions of all organs in the human body, not just the visual system.

### YEAR 1: FOUNDATIONS

- Clinical anatomy
- Cell & Molecular biology
- Epidemiology & Biostatistics
- Health information resources
- Healthcare quality improvement
- Clinical interviewing
- Intro to Medical Information Management
- Microbes & Host Responses
- Intro to Pathology
- Principles of Pharmacology

### YEAR 2: FOUNDATIONS

- Cardiovascular Systems
- Death & Dying
- Endocrine & Reproductive Systems
- Gastrointestinal Systems
- Healthcare quality improvement
- Clinical Diagnosis
- Renal-Urinary Systems
- Respiratory Systems
- Skin, Bone & Joint

### YEAR 2: CORE KNOWLEDGE

- Cardiovascular Systems
- Death & Dying
- Endocrine & Reproductive Systems
- Gastrointestinal Systems
- Healthcare quality improvement
- Clinical Diagnosis
- Renal-Urinary Systems
- Respiratory Systems
- Skin, Bone & Joint

### YEAR 3: CORE CLINICAL CLERKSHIPS

- Family & Community Medicine
- Internal Medicine
- Neurology
- Obstetrics, Gynecology & Women's Health
- Pediatrics
- Psychiatry
- Surgery
- 2 additional elective clerkships

### YEAR 4: PRE-RESIDENCY

- 4 weeks sub-internship
- 4 weeks ambulatory medicine
- 2 weeks emergency medicine
- 34 weeks electives (students typically do 2-4 week rotations in their specialty area of interest, i.e. ophthalmology, radiology, etc.)
- 2 weeks capstone

## ALTERNATIVE MEDICAL SCHOOL CURRICULUM

Many schools are changing to a three-year approach to medical school with the Pfeifer curriculum. During each phase of this curriculum model, students will take courses in:

### 15 MONTH CORE PRECLINICAL PHASE

- Foundations
- Cardiac
- Gastrointestinal
- Hematology/ Infection
- Musculoskeletal
- Neuro/ Psychiatric
- Pulmonary
- Renal
- Reproductive
- Integrative capstone leading to USMLE 1

### 15 MONTH CLERKSHIP PHASE

- Family Medicine
- Internal Medicine
- Neurology
- Obstetrics, Gynecology & Women's Health
- Pediatrics
- Psychiatry
- Surgery
- Enrichment/ Electives (3.5 months)