

# PRE-OPTOMETRY: ACADEMIC AND CAREER INFORMATION



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## NATURE OF THE WORK, EARNINGS AND OCCUPATIONAL OUTLOOK

The American Optometric Association (AOA) states that “Doctors of Optometry are independent primary health care providers who examine, diagnose, treat and manage diseases and disorders of the visual system, the eye and associated structures as well as diagnose related systemic conditions.” Optometry is the nation’s third largest independent healthcare profession. Over half the people in the United States wear glasses or contact lenses.

The number of new practicing optometrists is limited by the fact that there are presently only 20 schools and colleges of optometry in the United States and one in Puerto Rico. For the 2008-2009 academic year, 16 out of the 20 schools reported information regarding admission; 2,822 applicants submitted approximately 7,766 applications for Fall 2009 admissions. According to the Occupational Outlook Handbook (2010-2011 Edition), Optometrists held about 34,800 jobs in 2008. Employment of optometrists is expected to grow much faster than the average for all occupations through 2018 in response to the vision care needs of a growing and aging population. Most optometrists are in general practice. Optometrists usually remain in practice until they retire, so job openings arising from replacement needs are low. Employment growth will be fastest in retail optical stores and outpatient clinics. There continues to be a significant need for underrepresented minorities in this profession.

According to the American Optometric Association, the median annual wages of salaried optometrists were \$96,320. The middle 50 percent earned between \$70,140 and \$125,460. The individual net income of optometrists, like that of most professions, tends to rise with the number of years in practice. All states and the District of Columbia require that optometrists be licensed, which requires a Doctor of Optometry (O.D.) degree from an accredited optometry school and a passing score on both a written and a clinical state board examination. Licenses are renewed every 1 to 3 years and in all states, continuing education credits are needed for renewal.

## OPTOMETRY EDUCATION

The Doctor of Optometry degree is a 4-year program. Optometry programs include classroom and laboratory study of health and visual sciences, as well as clinical training in the diagnosis and treatment of eye disorders. Included are courses in pharmacology, optics, vision science, biochemistry, and systemic disease. Residencies are not required to develop a specialty. Since the four-year optometry curriculum prepares graduates in all areas, a residency does not introduce but rather enhances experiences in a selected area.

## PRE-OPTOMETRY PREPARATION

Admission requirements at all schools require the completion of a minimum of at least 90 semester units of college coursework; however, a Bachelor’s degree may be required and is strongly recommended. Ninety percent of new entrants at most schools have obtained Bachelor’s degrees. A student’s academic evaluation is based upon overall GPA, science GPA, college attended, degree progress, and course load difficulty. The **overall average GPA** for the 2009 entering class at the 16 schools and colleges of optometry that reported admission information ranged from a high of **3.61 to a low of 3.1**.

## COMMON COMPONENTS REQUIRED FOR ADMISSION:

Before applying to Optometry school, each applicant should become acquainted with at least one optometrist and if possible gain some first-hand experience to see what optometrists do on a daily basis to confirm motivation for entering optometry.

## COURSE REQUIREMENTS FOR OPTOMETRY SCHOOLS:

Prerequisite admission requirements vary from school to school. Please refer to the **Admission Requirements Handbook 2009-2010** at the **Association of Schools and Colleges of Optometry (ASCO)** website: [www.opted.org](http://www.opted.org). Most students major in the sciences (biology, chemistry, etc.) because the prerequisites for optometry schools are science intensive and they find a great deal of overlap between major requirements and those required for optometry school, although a science major is not required.

Students maintain responsibility for verifying course selection with individual optometry programs. Listed below are the prerequisite admission requirements for the 3 Optometry programs in California.

### CSULB courses that fulfill admission requirements for Southern California College of Optometry:

Pre-optometry Coursework	Semester Units	CSULB Courses
<b>Calculus</b>	3 semester units	Math 115 <b>OR</b> 119A <b>OR</b> 122
<b>General Biology or Zoology with lab</b>	8 semester units	Biology 211 & 212 & 213* (Biology 111 w/ 111L & 212 w/ 212L & 213 w/ 213L if taken prior to catalog year 2010-11)
<b>Microbiology or Bacteriology with lab</b>	3 semester units	Microbiology 211
<b>General Physics with lab</b>	8 semester units	Physics 100A & 100B <b>OR</b> 151 & 152
<b>General Chemistry with lab</b>	8 semester units	Chemistry 111A & 111B
<b>Organic Chemistry</b>	3 semester units	Chemistry 320A <b>OR</b> 322A <b>OR</b> 327
<b>Biochemistry</b>	3 semester units	Chemistry 411A <b>OR</b> 448 <b>OR</b> 302
<b>Human Anatomy with lab</b>	3 semester units	Biology 208
<b>Human Physiology with lab</b>	3 semester units	Biology 207 <b>OR</b> 342 w/ 342L
<b>Psychology</b>	3 semester units	Psychology 100
<b>English Composition &amp; Literature</b>	6 semester units	English 100, 102, <b>OR</b> equivalent
<b>Statistics</b>	3 semester units	Statistics 108, Psychology 210, Biology 260 <b>OR</b> Human Development 250

\*Required

### CSULB courses that fulfill admission requirements for the University of California, Berkeley School of Optometry:

Pre-optometry Coursework	Number of Semesters	CSULB Courses
<b>Calculus</b>	2 semesters	Math 122 & 123 (Req. for Physics 151 & 152) <b>OR</b> Math 119A & 119B
<b>General Chemistry with lab</b>	1 semester	Chemistry 111A
<b>Organic Chemistry with lab</b>	2 semesters	Chemistry 320A & 320B ( <i>Chem. &amp; Biochem. majors</i> ) <b>OR</b> 322A w/ 323A & 322B w/ 323B ( <i>Biology &amp; other majors</i> )
<b>Biochemistry</b>	1 semester	Chemistry 448 <b>OR</b> 441A & 441B
<b>General Physics with lab</b>	2 semesters	Physics 151 & 152
<b>General Biology with lab</b>	2 semesters	Biology 212 & 213 (Biology 212 w/ 212L & 213 w/

		213L if taken prior to catalog year 2010-11)
<b>Microbiology with lab</b>	1 semester	Microbiology 200 <b>OR</b> 211
<b>Human Anatomy with lab</b>	1 semester	Biology 208
<b>Human Physiology with lab</b>	1 semester	Biology 207
<b>Statistics</b>	1 semester	Biology 260 <b>OR</b> Statistics 108
<b>English</b>	2 semesters	English 102, 180 <b>OR</b> equivalent
<b>Psychology</b>	1 semester	Psychology 100 <b>OR</b> equivalent

**CSULB courses that fulfill admission requirements for Western University of Health Sciences College of Optometry:**

Pre-optometry Coursework	Semester Units	CSULB Courses
<b>Calculus</b>	3 semester units	Math 119A <b>OR</b> 122
<b>General Chemistry with lab</b>	8 semester units	Chemistry 111A & 11B
<b>Organic Chemistry with lab</b>	3 semester units	Chemistry 320A & 320B <b>OR</b> 322A w/ 323A
<b>Biochemistry</b>	3 semester units	Chemistry 448 <b>OR</b> 441A
<b>General Biology with lab</b>	8 semester units	Biology 211 & 212 & 213 (Biology 111 w/ 111L & 212 w/ 212L & 213 w/ 213L if taken prior to catalog year 2010-11)
<b>Microbiology with lab</b>	3 semester units	Microbiology 200 <b>OR</b> 211 <b>OR</b> 320
<b>General Physics with lab</b>	8 semester units	Physics 100A & 100B
<b>Statistics</b>	3 semester units	Statistics 108
<b>English</b>	6 semester units	English 100, 102, <b>OR</b> equivalent
<b>Psychology</b>	3 semester units	Psychology 100
<b>Human Anatomy with lab (Strongly Recommended)</b>	3 semester units	Biology 208
<b>Human Physiology with lab (Strongly Recommended)</b>	3 semester units	Biology 207 <b>OR</b> 342 w/ 342L

**OAT:**

The Optometry Admission Test (OAT) must be taken by all applicants seeking admission to schools and colleges of optometry. The OAT is a standardized exam, which exclusively contains multiple choice test items. There are six components to this exam: Quantitative Reasoning, Reading Comprehension, General Biology, General Physics, General Chemistry, and Organic Chemistry. The OAT is a computerized test offered at Prometric Testing Centers. The most desirable schedule for applicants is to take the exam from February of their junior year to October of their senior year in college. Visit [www.opted.org](http://www.opted.org) for more information.

**APPLICATION**

In July, 2009, OptomCAS the central application service for schools and colleges of optometry was launched. OptomCAS will provide applicants a single web-based application service and an opportunity to apply to more than one participating optometry school or college with one application. For more information, visit [www.optomcas.org](http://www.optomcas.org).

**For more information about Optometry, visit [www.opted.org](http://www.opted.org) and see your HPAO advisor for further information on the application process, application assistance, and a list of upcoming workshops and events.**