



# Cerritos College

## PRE-OPTOMETRY

### Career Pathway

*The following curriculum does not lead to an Associate in Arts Pre-Optometry Degree. However, students may fulfill requirements for a Natural Sciences Degree by completing a minimum of 18 units of science and math courses to include at least 4 units in the Physical Sciences, at least 4 units in the Biological Sciences, and at least 3 units in a math course beyond Intermediate Algebra. Please refer to the Cerritos College catalog for more information.*

Admission to school of optometry offering the Doctor of Optometry is very competitive. Because admission has become increasingly more difficult, having completed the equivalent of a Bachelor's degree is now imperative for the two California Schools of Optometry. The Bachelor's Degree may be in any major of the student's choice. Besides the Bachelor's degree being important, college grades (GPA) and the Optometry Admission Test (OAT) scores are used in preliminary screening. The OAT which has traditionally been administered in October and February is usually taken in the fall of the junior year. It is now being offered as a computerized test at Prometric Testing Centers. The OAT evaluates the following knowledge: biology, chemistry, organic chemistry, mathematical ability, physics, writing and reading comprehension. The test bulletin describes the test in detail, application procedures, and test dates. A copy of this bulletin can be obtained by writing to the Optometry Admission Testing Program, 211 E. Chicago Ave., Chicago, IL. 60611; Telephone 800.232.2159; email [www.opted.org](http://www.opted.org). Finally, a volunteer experience with an optometrist is highly appropriate in the preparation for optometry school. First, as a prospective optometry professional, you gain valuable insight into your decision whether optometry is the career path for you. Second, you develop the opportunity to receive a letter of support from an optometry professional, a vital element of your application.

#### ADDITIONAL SOURCES OF INFORMATION:

Another booklet of interest to applicants is "Optometry: A Career with Vision", giving descriptions and comparisons of individual school programs, entering class profiles, costs, etc. This booklet may be obtained at no cost, by writing the American Optometric Association, 243 N. Lindbergh Blvd., St. Louis, MO 63141. Another valuable source of information is the Association of Schools and Colleges of Optometry, <http://www.opted.org> or UC Berkeley Optometry Club called Foresight at <http://sites.google.com/site/ucberkeleyforesightclub/>. Information on UC Berkeley's pre-professional preparation coursework can be found at <http://www.assist.org> and [www.scco.edu](http://www.scco.edu) for Southern California College of Optometry in Fullerton.

#### COMMON LOWER DIVISION PREPARATION FOR SCHOOLS OF OPTOMETRY

			UNITS
BIOL	200	Principles of Biology	5
BIOL	201	Principles of Biology	5
CHEM	111	General Chemistry	5
CHEM	112	General Chemistry	5
CHEM	211	Organic Chemistry	5
ENGL	100	Freshman Composition	4
ENGL	102	Freshman Composition and Literature	3
MATH	112	Elementary Statistics	3
MATH	170	Analytic Geometry and Calculus I	4

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MICR	200	Principles and Applications of Microbiology	5
PHYS	101	General Physics	4
PHYS	102	General Physics	4
PSYC	101	General Introductory Psychology	3

### ADDITIONAL LOWER DIVISION PREPARATION FOR SPECIFIC SCHOOLS OF OPTOMETRY

#### Marshall B. Ketchum University - Fullerton [www.ketchum.edu](http://www.ketchum.edu)

Calculus, General Biology, General Chemistry, Organic Chemistry, Biochemistry, Anatomy, Physiology, Statistics and a Bachelor's degree will be required for those applying to Marshall B. Ketchum University/SCCO. SCCO allows you to repeat the OAT exam an unlimited number of times, but you must wait at least 90 days between testing dates (the 90-day wait includes any combination of written and computerized tests). SCCO will receive the computerized scores within three weeks after the test has been taken.

Besides the Bachelor's degree and the Optometry Admission Test results, all applications must submit three letters of recommendation from non-relatives. Your work within the community, student government, or other service organizations is considered to be important and should be included in your application. Volunteer experience with an optometrist is highly recommended in your preparation for optometry school. If the applicant meets the academic and personal criteria of the preliminary screening, they will be invited for a personal interview on campus.

Competitive applicants are advised to have an overall GPA of 3.5. OAT section scores are based on an index ranging from 200 to 400 with a score of 300 being the 50<sup>th</sup> percentile. A competitive applicant has OAT section scores for "Academic Average," "Total Science" and "Reading Comprehension" of at least 331. The OAT must be taken no more than 2 years prior to the date of your application submission. You are not penalized for taking the OAT multiple times. If you take the OAT more than once, they will look at your best "set" of scores, which are scores from one single test date. For example, if you have taken the OAT several times, they do not use your Physics section score from one test date and combine it with your Biology section score from another test date. They consider ONLY your best score set.

#### University of California – Berkeley <http://optometry.berkeley.edu>

CHEM	212	Organic Chemistry	5
MATH	190	Analytic Geometry and Calculus II	4
ENGL	246A	Survey of English Literature	3
<b>or</b> ENGL	246B	Survey of English Literature	(3)

The following Cerritos College coursework is recommended to prepare students for **required** Upper Division equivalent science coursework: A&P 200 - Human Anatomy, A&P 201 - Human Physiology, and BIOL 202, Molecular Biology/Genetics. Biochemistry is required and is taught at most universities and also required as an upper division course.

ADDITIONAL COURSES STRONGLY RECOMMENDED for application to the School of Optometry: Upper Division Genetics, Physiology of the Aging Process, Cell Biology of the Eye and Mechanisms of Ocular Disease, Molecular & Cell Biology, and Integrative Biology.

The minimum of a Bachelor's degree or its equivalent is now required for admission to UCBSO. Besides the additional science classes, the grade point average is extremely important. UCBSO expects the OAT be taken *only* online. Testing is available year round and an examinee can select the date, time, and place to test. In addition, examinees receive their scores immediately after the completion of the test at the test center. But, applicants who sit for the OAT after December 1st will **not** be considered for fall admission to Berkeley Optometry admissions cycle.

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In this last academic year, 2015-2016 there were 284 applicants, of which 69 students were admitted with the highest G.P.A. of a 4.0 and the lowest G.P.A was 2.75. The range of OAT scores was 310 at the lowest and the high score was 400. In addition, to the academic requirements, professional letters of recommendation are critical to the U.C. Berkeley School of Optometry application process.

**THE REQUIREMENTS FOR SCHOOLS OF OPTOMETRY ARE SUBJECT TO CHANGE WITHOUT NOTICE.**

### **CAREER OPPORTUNITIES:**

An optometrist or Doctor of Optometry (O.D.) are primary health care providers who are specifically trained and state licensed to examine, diagnose, manage, and treat conditions and diseases of the human eye and visual system. They may practice in specialties areas such as binocular disorders, contact lenses, low vision, ocular disease, geriatrics, pediatrics, or refractive surgery. They prescribe treatment such as corrective lenses, contact lenses, laser procedures or vision therapy. They may practice as independent practitioners, in a group practice, a health clinic or hospital. Job opportunities for the employment of optometrists are expected to grow faster than the average in California and average nationally for all occupations through 2017. Retirement of older practitioners is expected to create job opportunities. The age structure of the population is a factor affecting demand. People over 45 visit an Optometrist more frequently. Other factors include rising incomes and greater recognition of the importance of vision care. Employment of optometrists would grow more rapidly were it not for anticipated productivity gains that will allow each optometrist to see more patients. These expected gains stem from greater use of optometry assistants and other support personnel, who will reduce the amount of time optometrists need with each patient. Also, new surgical procedures using lasers are available that can correct some vision problems, and although optometrists still will be needed to provide preoperative and postoperative care for laser surgery patients, patients who successfully undergo this surgery may not require optometrists to prescribe glasses or contacts for several years. According to EUREKA, median net annual income for all optometrists was \$118,750 in 2015.

See State University General Education List.

**IMPORTANT NOTICE:** The requirements listed for major are subject to change without notice. It is the student's responsibility to check for the most recent information with a Cerritos College counselor or by consulting ASSIST at [www.assist.org](http://www.assist.org).

**NOTE:** Courses listed may require prerequisite coursework.

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# ASSIST

How to use **ASSIST** to find your major preparation for CSU/UC:

1. **Log on:** [www.assist.org](http://www.assist.org)
2. **Select an Institution:** select "Cerritos College" or other community college from pull-down menu
3. **Select:** "Type of Transfer Institution" such as "UC Los Angeles"
4. **Select a major from pull-down menu**  
Report will show the university courses on the left and comparable community college classes on the right.
5. **PRINT:**-print by clicking on gold "**PRINT THIS REPORT**" button on top. Then use the **ASSIST** screen menu on the top toolbar or click on the printer icon that will appear at the bottom of the page.

How to use **ASSIST** to explore the majors available at University of California and California State University campuses

- Click on "EXPLORE MAJORS"

How to use **ASSIST** to figure out whether courses from the community college are transferable to the CSU/UC.

- Select the community college of interest (Cerritos College)
- Select either CSU transferable courses or UC Transferable courses
- Select a department for the courses in question

\*USC Articulation available at:

[www.usc.edu/articulation](http://www.usc.edu/articulation) and **Select:** "TRANSFER PLANNING GUIDE."

## **IMPORTANT:**

*Students are advised to contact a Cerritos College counselor for more information & for details regarding other transfer agreements & options not available on ASSIST. Students can stop by the counseling desk to make an appointment or call (562) 860-2451 ext. 2231.*