# Pre-Optometry Fact Sheet

Creighton UNIVERSITY
Student Success
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## Prerequisite and Recommended Courses

Pre-optometry students who complete the following courses should be well-prepared to apply to a large percentage of optometry programs. Students are encouraged to research individual optometry programs to ensure they are aware of all prerequisite courses and other application requirements.

### PREREQUISITES OFTEN REQUIRED BY OPTOMETRY PROGRAMS

- General Biology I & II w/ Labs - 8 hours - BIO 201/205 & BIO 202/206
- General Chemistry I & II w/ Labs - 8 hours - CHM 203/204 & CHM 205/206
- Organic Chemistry I & II w/ Labs - 8 hours - CHM 321/322 & CHM 323/324
- General Physics I & II w/ Labs - 8 hours - PHY 201/205 & 202/206
- Biochemistry - 3 or 6 hours - CHM 371 or CHM 383 & CHM 384 (Biochemistry majors)
- Microbiology - 3 hours - BIO 350 (non-BIO majors) or BIO 452/453 (BIO majors)
- Physiology w/ Lab - 4 hours - BIO 449/450 or EXS 320
- Human Anatomy w/ Lab - 4 hours - EXS 331 or PHA 310/311
- Calculus - 3 or 4 hours - MTH 231 or MTH 245
- Statistics - 3 hours - Many options for courses
- Psychology - 3 hours - PSY 201
- English - 6 hours

### ADDITIONAL RECOMMENDED COURSES

- Many optometry programs may accept AP/CLEP/IB, dual-enrollment, or community college courses to meet prerequisites; applicants should research individual schools to be certain of their admissions policies.

### PRE-OPTOMETRY GROUPS AND RESOURCES

**Pre-Optometry Club:** All pre-optometry students can participate in the Pre-Optometry Club. This student organization provides opportunities to further explore and gain experience in the optometry profession. Learn more on CU Involved: https://cuinvolved.creighton.edu/organization/pre-optometry

**Optometry Programs:** There are 25 Association of Schools and Colleges of Optometry (ASCO) member schools in the United States and Puerto Rico. Students can access a list through the Association of Schools and Colleges of Optometry's website: optometriceducation.org

Additionally, students will benefit from using OptomCAS to further research Optometry programs, accessible through: optomcas.org

### BECOMING A COMPETITIVE APPLICANT

Applicants to optometry school must complete a minimum of 90 credit hours (three years) of college coursework, which includes optometry prerequisites. Most pre-optometry students complete bachelor's degrees prior to entering optometry school. Competitive applicants for admission have solid academic records, well-rounded profiles of co-curricular experiences, strong scores on the Optometry Admission Test (OAT), supportive letters of recommendation, and can clearly articulate their reasons for choosing optometry.

#### Selecting a Major, Grades, and GPA

Students are encouraged to choose a major in which they can demonstrate strong overall academic performance, while also focusing on developing a solid foundation in the sciences. Ideally, a major should be based on student interests and should support an alternate career. Optometry programs look for students who demonstrate the academic ability to handle rigorous course loads.

Grades play a crucial role in optometry program admissions, reflecting a student's ability to handle challenges. Maintaining grades above a "B" is important, especially in the two years prior to applying. Grades below a "B" or having more than two withdrawals (W) may raise concerns about academic readiness or judgment.

GPAs calculated on optometry school applications include coursework completed at all colleges attended and all attempts at a course.

Aim for GPAs of **3.3 or above**.

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## COURSE SCHEDULING CONSIDERATIONS

First- and second-year students usually take two natural science or math subjects each semester.

**Chemistry:**

General Chemistry I (CHM 203/204) and General Chemistry II (CHM 205/206) are typical choices for freshman fall and spring. To be eligible to take General Chemistry in the freshman year, students must achieve a sufficient score on the Quantitative Assessment for New Students (QANS). Students who do not achieve a sufficient QANS score will need to complete Introductory General Chemistry 1 (CHM 102) with a grade of "B-" or better to progress to CHM 202/204.

**Biology:**

General Biology I (BIO 201/205) and General Biology II (202/206) are typical choices for freshman fall and spring. Completion of either General Chemistry I (CHM 203) with a grade of "C" or better or Introductory General Chemistry 1 (CHM 102) with a grade of "B-" or better is required in order to take General Biology II.

**Math:**

Pre-optometry students may be required to complete a calculus course. This requirement can be fulfilled by either MTH 231 or MTH 245. Math, physics, and chemistry majors will need more than one semester of calculus and should take MTH 245.

**Physics:**

Students who have sufficient math and physics (a year of high school physics or a semester of college introductory physics, math through pre-calculus) are eligible to take General Physics I (PHY 201/205) and General Physics II (PHY 202/206). Prospective math, physics, and chemistry majors may take alternate sections of General Physics and additional math.

**Summer Classes:**

Science courses may be taken in the summer, but only when there are good reasons for doing so (not just a vague desire to "catch up") and not at community colleges. Speak with a pre-health advisor about timelines.

**Sample First Semester Schedule**

*Course sequencing may vary depending on a student's readiness*

- General Biology I w/ Lab (4 hours)
- General Chemistry I w/ Lab (4 hours)
- Magis Core Class (3 or 4 hours) - ENG or Critical Issues & COM 101
- Magis Core Class (3 hours) - PHL or THL
- Maybe another Magis Core Class (3 hours) - PSY, SOC, or Foreign Language
- RSP Class (.5 hours)

## CO-CURRICULAR EXPECTATIONS

### Volunteer & Service

It is important to demonstrate sustained commitment over time. Students should have service experiences in healthcare and non-healthcare settings. Check out the Schlegel Center for Service and Justice for opportunities: https://www.creighton.edu/scsj.

### Shadowing

Students must gain knowledge of the profession by shadowing professionals in their field. Students should shadow practicing optometrists to gain an understanding of the profession and its day-to-day responsibilities. Some optometry schools require a minimum of 10 to 40 hours of shadowing; others require shadowing in at least 2 settings.

### Research

Research experience is not a requirement for admission to optometry programs, but may add an extra layer to the application if the student is particularly interested in research. See the Center for Undergraduate Research and Scholarship for opportunities: www.creighton.edu/curas.

### Leadership and Teamwork

Students must demonstrate leadership and interpersonal skills. Consider initiating group projects, serving as an officer in a student organization, or working as a teaching assistant. Students must also demonstrate the ability to work collaboratively.

### Healthcare Experience

Students can seek opportunities for hands-on, direct patient care experience. This can be gained through volunteer positions in healthcare settings or through employment, including as an optometric assistant, CNA, EMT, phlebotomist, and home health aide.

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