Optometrists, also known as doctors of optometry, or ODs, are the main providers of vision care. ODs examine people’s eyes to diagnose vision problems such as nearsightedness and farsightedness. They test patients’ depth and color perception and ability to focus and coordinate the eyes. ODs prescribe eyeglasses or contact lenses. They provide treatments such as vision therapy or low-vision rehabilitation. ODs also diagnose conditions caused by systemic diseases such as diabetes and high blood pressure, referring patients to other health practitioners as needed.

Most optometrists are in general practice. Some specialize in work with the elderly, children, or partially sighted persons who need specialized visual devices. The State of Iowa does not have a college of optometry; as a result, University of Iowa pre-optometry students apply to one or more of the 23 colleges of optometry located in the United States (five are in the Midwest). You can review optometry schools and programs at this website: https://optometriceducation.org/students-future-students/member-schools-and-colleges/

As Pre-Optometry advisors, we strive to guide you to the best of our abilities, but it is important to know that optometry programs are not standardized. From the beginning, you are encouraged to research possible programs of interest to identify discrepancies in pre-requisite and other requirements between schools of optometry. It is important for you to be proactive in cross-referencing required prerequisite coursework. Your advisor is happy to discuss specific program requirements as they relate to University of Iowa coursework.

Sample Pre-Optometry Four-Year Academic Plans

**Plan A: Starting with General Chemistry**

**Year 1:**
- CHEM:1070 General Chemistry I
- MATH based on UI placement
- PSY:1001 Elementary Psychology**

**Year 2:**
- CHEM:1120 Principles of Chem. II
- BIOL:1411 Foundations of Biology
- Statistics (STAT:3510 or STAT:4143)
- MATH related to major*
- PSY:1001 Elementary Psychology**

**Year 3:**
- PHYS:1511 Col. Physics I
- CHEM:2220 Org. Chemistry II**
- HHP:2400 Human Physiology**
- CHEM:2210 Organic Chemistry I
- BIOL:1412 Diversity of Form and Function
- ENGLISH LITERATURE COURSE**
  (Beyond ENGL:1200 and RHETORIC)

**Year 4:**
- Anatomy course**
- Courses to complete major
- PHYS:1512 Col. Physics II
- CHEM:2410 Org. Chem. Lab**
- Microbiology course
- Take OAT in spring or summer
- Summer: Apply to optometry school
- Late summer/
- Early fall

- Biochemistry course**
- Courses to complete major
Plan B: Starting with Principles of Chemistry

Year 1:
- CHEM:1110 Principles of Chem. I
- MATH related to major*
- or MATH:1850 Calculus I*

CHEM:1120 Principles of Chemistry II
BIOL:1411 Foundations of Biology
PSY:1001 Elementary Psychology**

Year 2:
- BIOL:1412 Div. of Form & Function
- CHEM:2210 Organic Chemistry I
- Statistics (STAT:3510 or STAT:4143)

CHEM:2220 Organic Chemistry II**
CHEM:2410 Organic Chem. Lab**
ENGLISH LITERATURE COURSE**
(Beyond ENGL:1200 and RHETORIC)

Year 3:
- PHYS:1511 Col. Physics I
- HHP:2400 Human Physiology course**

PHYS:1512 Col. Physics II
Microbiology course
Summer: Apply to optometry school

Take OAT in spring or summer late summer/early fall

Year 4:
- Anatomy course**
- Courses to complete major

Biochemistry course**
Courses to complete major

*Minimum requirements for admission to all optometry schools are one year each of biology or zoology, chemistry, physics, and English; and a college math course (most schools require one semester of calculus). Program requirements vary. Check for additional information about prerequisites: www.opted.org or https://www.optomcas.org/information-about-schools-colleges/school-college-prerequisites

** These are recommended courses (and required at some schools; see school websites above for details).

Academic Guidelines
OptomCAS calculates a standardized GPA to aid the schools and colleges of optometry in evaluating applicants using uniform and consistent criteria. For optometry schools nationwide, the fall 2019 cumulative average GPA for the entering classes was 3.7 (the average cumulative GPA for applicants was 3.36). Some schools require at least a “C” in each of the prerequisite courses (see prerequisite list at the end of this Guide). Students whose academic record falls significantly below the averages are unlikely to be accepted to optometry school. A bachelor’s degree is not required at some optometry schools, but is typically preferred, and most students have a bachelor’s degree prior to entry. (Of all applicants in the United States in 2019, 100% of those admitted to programs had a bachelor’s degree.) A profile of the 2019 Optometry entering class may be found here: https://optometriceducation.org/student-profile-prerequisites/profiles-of-the-entering-classes

Non-Academic Guidelines
Important non-academic factors include good moral character, excellent interpersonal skills, a deep commitment to optometric health care, evidence of leadership potential, and service to others. Most optometry schools want evidence of a candidate’s exposure to the field of optometry. Successful applicants will likely have worked, or volunteered, in an optometrist’s office. Students are encouraged to investigate opportunities for working/volunteering in such a setting early in their undergraduate years.
The Application Process
The centralized application service, OptomCAS, enables students to apply to multiple schools with a single application. Candidates should check with their pre-optometry advisors for the most recent information. The 2019-2020 OptomCAS application cycle opened in late June 2020 and is similar each year. Applications should be submitted in the year preceding the year for which a student is seeking admission. Since many optometry schools have rolling admission, it is in a student’s best interest to apply early (in late summer or early September). Application deadlines vary; check the student profile section of www.opted.org, as noted above, for deadlines at individual schools.

Early Entry/Early Admission
Some optometry programs accept students for entry after 90 semester hours of undergraduate coursework. Most programs prefer a bachelor’s degree, and several require one. Students may check the ASCO website for preferences at schools in which they are interested. Additionally, a few schools have an early admission (or early decision) cycle for well-qualified applicants. This cycle typically begins in the fall or early spring of the year before matriculation. Grade point averages are usually higher for successful students in early admission.

Diversity in Optometry
ASCO and its member institutions have embraced the concepts of diversity and multiculturalism in optometric education and in the profession. ASCO bases its diversity program on several assumptions including greater diversity among health professionals, improved access to care for our diverse society, greater patient choice and satisfaction, better patient-provider communication, and better educational experiences for all students. The percentage of students who identify as Black or African American was 5% in 2019. The percentage of students who identify as Hispanic or Latino was 11%. The percentage of students who identify as Asian was 32%. The percentage of students who identify as Caucasian was 46%. The percentage of students who identify as two or more races was 3.0%. More women than men enrolled in optometry programs in 2019. The 2019-2020 entering class was 70% female; 29% male; and less than 1% did not report gender.

Entrance Examination Requirement (OAT)
The Optometry Admission Test (OAT) is required for admission to all colleges of optometry in the United States. The OAT is a standardized, computer-based exam that consists of four tests: Survey of the Natural Sciences (Biology, General Chemistry, and Organic Chemistry); Reading Comprehension; Physics; and Quantitative Reasoning. The scoring range is from 200 to 400 with the mean score assigned to 300. Students typically take the OAT after courses in mathematics, biology, general chemistry, organic chemistry, and physics. In addition, students prepare by self-study using online or OAT study guide materials (available at major bookstores) or by participating in a formal OAT test preparation course. A candidate may retake the OAT but only after a 90-day waiting period. You may read about OAT test preparation at the following website: https://www.ada.org/en/oat/test-preparation.

Letters of Evaluation/Recommendation
Applicants typically obtain letters from science faculty members, faculty members from their major department, and optometrists. At least one letter from a practicing optometrist is required at some schools. The mix of required letters varies by school; students should check the specific requirements for each optometry school to which they wish to apply. UI does not have a committee process for letters of evaluation. Instead, students request letters from their individual evaluators.
Interviews
Optometry schools often require personal, on-campus interviews. Selected candidates will be contacted to arrange an interview. The interview is an important part of the selection process, and candidates should prepare well for the interview. Web-based virtual practice interviews are available through the UI Career Center.

Criminal Background Checks
Students should check with the individual optometry schools for information about whether a Criminal Background Check is required. Certain hospitals and optometric placements will require a Criminal Background Check regardless of whether an individual school requires one. Students should make careful decisions because charges or convictions may have negative consequences.

Citizenship/International Students
Some optometry schools accept students who are not U.S. citizens. Some schools require a financial affidavit confirming sufficient financial resources. International students should contact optometry schools for more information.

Websites
Association of Schools and Colleges of Optometry (ASCO):  www.opted.org
American Optometric Association:  www.aoa.org

Pre-Optometry Coursework Checklist & Minimum Requirements at Most Optometry Schools

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH:1850</td>
<td>Calculus I</td>
</tr>
<tr>
<td>STAT:3510 or 4143</td>
<td>Statistics</td>
</tr>
<tr>
<td>BIOL:1411</td>
<td>Foundations of Biology</td>
</tr>
<tr>
<td>BIOL:1412</td>
<td>Diversity of Form &amp; Function</td>
</tr>
<tr>
<td>MICR: 3164 or 2157</td>
<td>Microbiology</td>
</tr>
<tr>
<td>PHYS:1511</td>
<td>Col. Physics I</td>
</tr>
<tr>
<td>PHYS:1512</td>
<td>Col. Physics II</td>
</tr>
<tr>
<td>PHYS:1611</td>
<td>Intro. Physics I</td>
</tr>
<tr>
<td>PHYS:1612</td>
<td>Intro. Physics II</td>
</tr>
<tr>
<td>ENGL:1200</td>
<td>English course</td>
</tr>
<tr>
<td>RHET:1030</td>
<td>English course (Beyond ENGL:1200 and RHETORIC)</td>
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<tr>
<td>ACB:3110 or ANAT:1100</td>
<td>Anatomy</td>
</tr>
<tr>
<td>BIOC:3110</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>HHP:3500</td>
<td>Physiology</td>
</tr>
<tr>
<td>CHEM:1110</td>
<td>Principles of Chem. I</td>
</tr>
<tr>
<td>CHEM:1120</td>
<td>Principles of Chem. II</td>
</tr>
<tr>
<td>CHEM:2210</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>ENGLISH LITERATURE COURSE**</td>
<td>(Most schools require an organic lab.)</td>
</tr>
<tr>
<td>___________</td>
<td>___________</td>
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One year of physics **

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>PHYS:1511</td>
<td>Col. Physics I</td>
</tr>
<tr>
<td>PHYS:1611</td>
<td>Intro. Physics I</td>
</tr>
<tr>
<td>PHYS:1701</td>
<td>Physics I</td>
</tr>
<tr>
<td>PHYS:1702</td>
<td>Physics II</td>
</tr>
</tbody>
</table>

**Most students enroll in the PHYS:1511-1512 sequence. The calculus-based sequences PHYS 1611-1612 or PHYS:1701-1702 (physics majors only) are also possible. See your advisor for help in choosing the appropriate sequence for your major.

Additional Recommendations (see the ASCO website above for individual programs):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACB:3110 or ANAT:1100</td>
<td>Anatomy</td>
</tr>
<tr>
<td>BIOC:3110</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>HHP:3500</td>
<td>Physiology</td>
</tr>
<tr>
<td>CHEM:2220</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>CHEM:2410</td>
<td>Organic Chemistry Lab</td>
</tr>
<tr>
<td>(2701,2301,2401,2501,2601,2915,2930, etc.)</td>
<td>Additional Psych.</td>
</tr>
</tbody>
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Academic Advising Center, 2020-2021