**Biology Major - Pre-Optometry Track (2017-2018)**

**NOTE:** Students completing the requirements listed on the Biology Major Advising Guide AND the courses below will meet the prerequisites of most optometry school in the U.S. Students following this checklist will NOT receive a Pre-Optometry Option and these courses are not tracked in MyDegrees. The information below is subject to change.

### Pre-Optometry Required and Recommended Courses

The following additional courses are also required or recommended for Pacific University's College of Optometry and a few other optometry schools. Courses listed below can be applied to the category requirement listed in parentheses or taken in addition to this requirement (listed in the MyDegrees checklist in Online Services - MyOSU). **Students must check pre-requisites at any school to which they apply for up-to-date information about their requirements.**

#### Required Science Coursework:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI 331, 332 &amp; 333: Anatomy &amp; Physiology Lecture</td>
<td>(3 credits each, Fall, Winter, Spring, Respectively)</td>
<td></td>
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<tr>
<td>BI 341, 342, &amp; 343: Anatomy &amp; Physiology Lab</td>
<td>(2 credits each, Fall, Winter, Spring, Respectively)</td>
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</tbody>
</table>

**Note:** The anatomy and physiology series may fulfill the physiology and organismal biology major requirements for pre-optometry students who are viable professional school candidates — see your advisor for more information.

#### Other Required Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 201 &amp; 202 (3 cr each)</td>
<td>(3 credits fulfills Social Processes and Institutions)</td>
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</tbody>
</table>

Writing and English literature – 9 credits

- COMM and Writing Intensive Courses (WIC) do not count.
- Technical Writing (WR 327) and Scientific Writing (WR362) are highly recommended (Fulfills the Writing II & Major requirements)

#### Recommended Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH 332: Physics of Light, Vision, &amp; Color</td>
<td>(Fulfills Upper Division Science Elective - see MyDegrees)</td>
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<tr>
<td>HSTS 417: History of Medicine</td>
<td>(Fulfills Synthesis: Science, Tech, &amp; Society)</td>
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<tr>
<td>MB 416: Immunology</td>
<td>(Fulfills Upper Division Science Elective)</td>
<td></td>
</tr>
<tr>
<td>PHL 444: Biomedical Ethics</td>
<td>(Fulfills Synthesis: Science, Tech, &amp; Society)</td>
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<tr>
<td>PSY 330: Brain &amp; Behavior</td>
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<tr>
<td>PSY 350: Human Lifespan Development</td>
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<tr>
<td>PSY 381: Abnormal Psychology</td>
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</tbody>
</table>

Various Public Health courses and/or business courses

#### Online and Study Abroad Courses

Some optometry schools will not accept online science courses (especially those with online labs) or classes from study abroad programs. Although specific professional courses should not be done abroad, study abroad is a great opportunity and very feasible for pre-optometry students. If you are interested in study abroad, begin a dialogue with your advisor as early as possible, even during your first year. You can work with an advisor on how to schedule and apply study abroad courses to your degree. Students should, under no circumstances, take specific professional school prerequisite courses online.

### Optometry at a Glance

Optometry is a healthcare profession specifically devoted to the correction of vision deficiencies. Optometrists examine people’s eyes to diagnose vision problems and eye diseases. Most optometrists are in general or private practice. Some specialize in work with the elderly, children, or partially sighted persons. Some specialize in contact lenses, sports vision, or vision therapy.

**Research Opportunities:** Research provides the opportunity to develop analytical and communication skills, as well as an understanding of research methods and the process of science. For these reasons, it is considered excellent preparation for a career in Optometry. For opportunities visit [http://ib.oregonstate.edu/professional/research-internships](http://ib.oregonstate.edu/professional/research-internships).
## Optometry and Healthcare Experience

Applicants should have at least 30 hours of observation under the supervision of an optometrist (non-relative), preferably in more than one mode of practice. Other medical and research experience is also helpful, though volunteering and job opportunities are the most valuable.

**Shadowing** and other healthcare experience is a good way to get exposure to the field and to decide if optometry is for you. Contact offices and clinics either in Corvallis or at home to see what opportunities are available. To learn more about healthcare experience, you may view this document: [http://ib.oregonstate.edu/files/ib/Healthcare%20Experience.pdf](http://ib.oregonstate.edu/files/ib/Healthcare%20Experience.pdf).

**Internships & Volunteering:** See the Medical and Health Professions sections of the internships & volunteering list at [http://ib.oregonstate.edu/professional/internship-research/intern-volunteer-list](http://ib.oregonstate.edu/professional/internship-research/intern-volunteer-list).

**International Medical Internships** through the OSU study abroad office are a great way to prepare you for work in a diverse population, improve language and/or cross-cultural communication skills, and gain clinical experience through clinic rotations.

[http://ib.oregonstate.edu/professional/international](http://ib.oregonstate.edu/professional/international)

**Summer camps:**

There are many summer camps across the nation aimed at providing participants with opportunities to learn about the profession of optometry and the process of becoming an optometrist.

**Health Care Careers Enrichment Programs**

See the following link for a searchable database of summer programs (including Summer Camps as mentioned above) to learn more about what it is like to work in a health care or research field. [https://explorehealthcareers.org/enrichment-programs/](https://explorehealthcareers.org/enrichment-programs/)

## Leadership

Health profession schools value leadership experiences. There are a variety of ways to gain leadership skills as an undergraduate, including officer roles in student clubs, coordination for organizations (i.e. non-profits and volunteer opportunities), or being a peer mentor for a department or college. What you do is more important that what your title is—be creative. You may also take leadership classes or earn a leadership minor.

[http://agsci.oregonstate.edu/leadership_minor](http://agsci.oregonstate.edu/leadership_minor)

## Optometry School

### Admissions Test

**Optometry Admission Test (OAT)** is an optometry admission test designed to provide optometry education programs with a means to assess program applicants’ potential for success. It is required for admittance into a Doctor of Optometry (OD) program.


### References

It is important to begin establishing relationships with professors and professionals throughout your education. Applicants will generally need a minimum of three references, including a non-relative optometrist and a faculty member. References who can speak about you beyond a grade you received and can address your character, professionalism, and leadership will be particularly strong.

### Campus Resources

**Pre-Optometry Advising**

Go to [http://ib.oregonstate.edu/advising/appointments](http://ib.oregonstate.edu/advising/appointments).

### Additional Resources

- American Optometric Association: [www.aoa.org](www.aoa.org)
- Association of Schools and Colleges of Optometry: [Includes a list of all U.S. optometry schools](https://optometriceducation.org/)
- Explore Health Careers: [www.explorehealthcareers.org](www.explorehealthcareers.org)
- Pacific University College of Optometry: [https://www.pacificu.edu/future-graduate-professional/colleges/college-optometry](https://www.pacificu.edu/future-graduate-professional/colleges/college-optometry)
- University of California Berkley Optometry: [http://optometry.berkeley.edu/](http://optometry.berkeley.edu/)
- Western University College of Optometry: [http://www.westernu.edu/optometry/](http://www.westernu.edu/optometry/)
- Optometry Centralized Application Service (OptomCAS): [includes information for all optometry schools](http://www.optomcas.org/).