Biology Major - Pre-Optometry (2016-2017)

NOTE: This is not an official option in the Biology Major. Students completing the requirements listed on the Biology Major Advising Guide AND the courses below will meet the prerequisites of most optometry schools 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 courses are 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 prerequisites at any school to which they apply for up-to-date information about their requirements.

Required Science & Math Courses:
- BI 331, 332, & 333 (3,3,3) Advanced Human A&P Lecture*
- BI 341, 342, & 343 (2,2,2) Advanced Human A&P Lab*

*The Anatomy and Physiology series may fulfill the Physiology and Organismal Biology major requirements for pre-optometry students who are viable professional school candidates. This must be approved by an academic advisor.

Other Required Courses:
- PSY 201 & 202 (3 cr each) (3 credits fulfills Social Processes and Institutions)
- 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:
- PH 332 – Physics of Light, Vision, & Color (Fulfills Upper Division Science Elective - see MyDegrees)
- HSTS 417 – History of Medicine (Fulfills Synthesis: Science, Tech, & Society)
- PHL 444 – Bioethics (Fulfills Synthesis: Science, Tech, & Society)
- PSY 330 – Brain & Behavior
- PSY 350 – Human Lifespan Development
- PSY 381 – Abnormal Psychology
- Various Public Health courses and/or business courses

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.

Online & 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. You can work with your advisor on how to schedule and apply study abroad courses to your degree. Students should not take specific professional school prerequisite classes online.
Optometry and Other Healthcare Experience

Applicants should have at least 30 hours of observation under the supervision of an optometrist, 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. OSU international medical internships information: [http://ie3global.org/](http://ie3global.org/).

- **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. [http://explorehealthcareers.org/en/careers/programs](http://explorehealthcareers.org/en/careers/programs).

**Leadership**

Health professions schools value leadership experience as a way to develop interpersonal skills and the ability to lead as part of a team. There are a variety of ways to incorporate leadership experiences as an undergraduate, including: officer roles in a student club, coordinator for an organization (public, private, or non-profit), or being a peer mentor or an ambassador for your college or department. Students may also consider taking leadership courses or completing the OSU Leadership Minor [http://agsci.oregonstate.edu/leadership_minor/](http://agsci.oregonstate.edu/leadership_minor/).

Optometry School

**Admissions Test**

**Optometry Admission Test** (OAT) 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. 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**

- Association of Schools and Colleges of Optometry: [www.opted.org](http://www.opted.org)
- Explore Health Careers [www.explorehealthcareers.org](http://www.explorehealthcareers.org)
- Pacific University College of Optometry: [www.pacificu.edu](http://www.pacificu.edu)
- University of California Berkley Optometry: [http://optometry.berkeley.edu/](http://optometry.berkeley.edu/)
- Optometry Centralized Application Service [http://www.optomcas.org/](http://www.optomcas.org/) includes information for all schools

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