

BIOLOGY MAJOR—Pre-Dentistry Option 2021-22

The Biology major Pre-Dentistry option is designed to allow students interested in dentistry to optimally meet the requirement for their professional goal in the context of their Biology major. Students Completing the option will meet the prerequisites for most CODA accredited dental schools in the U.S. and abroad. Students should always consult the requirements of all schools to which they plan to apply, and some dental schools will not accept online prerequisite courses (particularly those with online labs) or prerequisite courses taken during study abroad.

A 3.0 GPA is required to complete the Pre-Dentistry option. Courses used to satisfy option requirements also satisfy the Organismal Biology, Physiology, Writing Intensive Course (WIC), Physics or Computer Science and Quantitative Applications, and Experiential Learning or Integrative Biology Elective requirements in the Biology major. Other coursework taken abroad or at Hatfield may be approved by the IB lead advisor.

Previous versions of this option are different and are tracked in MyDegrees. All courses and prerequisites are subject to change, and the listing of term is based on projected Corvallis campus offerings.

Pre-Dentistry Courses

Course	Pre(Co)requisites	Term	Credits
BHS 107 Pre-Dental Orientation		W	1
PSY 201 AND PSY 202 General Psychology		F, W, SP, SU	4,4
PHL 205 Ethics OR PHL/REL 444 Biomedical Ethics	Sophomore standing for PHL/REL 444	F, W, SP, SU F, W, SP, SU	4 4
BI 319 Critical Thinking & Communication in the Life Sciences	BI 221, 222, 223 (C-), ST 351	F, W, SP	3
BI 331-333 Advanced Human Anatomy & Physiology AND BI 341-343 Advanced Human Anatomy & Physiology Lab	BI 221, 222, 223 (C-), CH 233/263 (C-); courses must be taken in order	F, W, SP	3,3,3 2,2,2
PH 201, 202, 203 General Physics	MTH 112	F, W, SP, SU	5,5,5

Experiential Learning or Physiology/Manual Dexterity Elective Course(s) (select on of the following tracks)

Track I Experiential Learning Credits (complete any combination of three credits below)

BI 309 Teaching Practicum OR BI 409 Advanced Teaching Practicum	By application	F,W,SP	1-3
BI 401 Research and Scholarship	By application	F,W,SP,SU	1-3

Track II Physiology or Manual Dexterity Elective (select one course)

BI 451 Functional Anatomy of the Human Muscular System	BI 331-333/341-343, by application	SU	4
BI 485 Monster Biology	BI 311 and BI 370 (may be concurrent)	W	3
MB 436 The Human Microbiome	BB 314 or MB 302	SP	3
Z 425 Embryology and Development	BI 311, BB 314, junior standing	F	5
Z 438 Behavioral Neurobiology	BI 221, 222, 223 (C-), CH 233/263 (C-)	SP	3
Z 477 Aquatic Entomology	BI 221, 222, 223 (C-)	Alternate W	4

Applying to Dental School

Application Seminar: Students should plan to attend the fall workshop on being a competitive applicant, as well as the winter application seminar. Both will be announced through the pre-dental listserv.

Admissions Test: Dental school applicants must take the Dental Admissions Test (DAT <http://www.ada.org/dat.aspx>). Sylvan Prometric Centers offer the test in Portland, Eugene, Bend, and Medford.

Manual Dexterity: Dentistry requires a great deal of manual dexterity and artistry as a profession, and students are expected to test and develop these skills during their undergraduate careers. Examples of activities include playing an instrument, engaging in three-dimensional art (ceramics, carving, jewelry making, etc.) or activities such as model building or origami. Students can and should engage in these activities at the OSU craft center, community courses or as hobbies on their own.

Leadership: Health Profession 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

OSU Pre-Dental Resources and Information

Dental experience is very important. Network with dentists from your hometown, or seek out local opportunities. Many students are trained to assist or work at local dental labs. Other medical experience is also helpful and some opportunities are listed below:

Shadowing and other healthcare experience is a good way to get exposure to the field and to decide if dentistry is for you, and student should plan to end up with 50 or more hours of experience. Contact offices and clinics either in Corvallis or at home to see what opportunities are available. To learn more about healthcare experience, see <https://science.oregonstate.edu/premed/healthcare-experience>

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>.

Summer Programs: There are summer programs at dental schools that are designed to help support rural, disadvantaged and underrepresented minority students to gain entrance to professional school. An example of one is the Summer Health Professions Education Program: <http://www.shpep.org/>.

International Medical Internships: 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>

Health Care Careers Enrichment Programs: See links below for a searchable database of summer programs to learn what it is like to work in health care or research: <https://services.aamc.org/summerprograms/>
<https://explorehealthcareers.org/enrichment-programs/>
<https://www.naahp.org/public-resources/student-resources/student-announcements/student-opportunities>

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 being a Dentist. <http://ib.oregonstate.edu/professional/research-internships>

Pre-Dental Society Information

Pre-dental students are encouraged to join the Pre-dental Society. The club takes field trips, visits OHSU, and has speakers. Contact predental@oregonstate.edu.

Pre-Dental Listserv

Join the pre-dentistry listserv to hear about opportunities for pre-dental students. To join, send an email using your ONID account to predental-join@lists.oregonstate.edu and reply to the email response.

Pre-Dental Advising

Contact your assigned advisor: <http://ib.oregonstate.edu/advising/appointments>

Additional Pre-Dental Information

<https://www.science.oregonstate.edu/predental>

Other Course Tips and Recommendations:

Baccalaureate Core and Electives:

It is important to take liberal arts courses as preparation for dental school. Baccalaureate Core Courses requiring writing and literature are especially useful.

Business Electives or Minor:

Running a dental practice is a significant business endeavor, and a background in business coursework can be helpful. Taking business electives is a good idea, and some students complete a minor. Completing a business minor at Oregon State University fulfills the first year of an MBA at OSU, and a student can complete their MBA in 9 months after graduation (during a gap year).

Online & Study Abroad Courses:

Although specific professional courses should not be done abroad, study abroad is a great opportunity and very feasible for pre-dental students. You can work with your advisor on how to schedule and apply study abroad courses to your degree. See programs at <http://ib.oregonstate.edu/professional/international>.

Students should not take specific professional school prerequisite classes online. Some dental schools will not accept online science courses (especially those with online labs) or classes from study abroad programs.

AP and IB scores

Some dental schools *will not accept* AP and IB scores for science coursework even if OSU accepts them as a replacement for requirements. Speak to your advisor for more information.

Additional Resources

American Dental Association: www.ada.org

American Student Dental Association: <http://www.asdanet.org/>

American Dental Education Association: www.adea.org

Biology Careers page – Medicine and Health Careers: <http://ib.oregonstate.edu/professional/careers>

Explore Health Careers: www.explorehealthcareers.org

Furman University Health Care Links: <http://facweb.furman.edu/~jsnyder/careers/medical.html>

Oregon Health & Sciences University School of Dentistry: www.ohsu.edu/sod/

Oregon Pacific Area Health Education Centers Health Careers: <http://www.opahec.org/>