# **BIOLOGY MAJOR - Pre-Dentistry Option 2023-24**

Document available online at https://ib.oregonstate.edu/undergraduate/advising/college-advising-guide.

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 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. 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 Computational and Quantitative Applications, and Experiential Learning or Integrative Biology Elective requirements in the biology major. Other coursework taken abroad may be approved by the IB lead advisor. **Previous versions of this option are different and 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	Description (Credits)	Term(s)	Pre-requisites	Comments
BHS 107	Pre-Dental Orientation (1cr)	W	-	-
PSY 201 AND PSY 202	General Psychology* (4cr, 4cr)	All	-	*BC: Social Processes & Institutions
PHL/REL 444	Biomedical Ethics* (4cr)	All*	Sophomore +	*BC: Sci. Tech and Society;
				Ecampus all terms but summer
BI 319	Theory, Practice, Discourse Life Science (3cr)	F, W, Sp	BI 221, 222, 223 (C-) & ST 351	-
BI 331-333 <u>AND</u>	Advanced Human A&P (3cr, 3cr, 3cr) AND	F, W, Sp	BI 221, 222, 223 (C-) & CH 233/263	Courses must be taken in order
BI 341-343	Advanced Human A&P Lab (2cr, 2cr, 2cr)		(C-)	
PH 201, 202, 203	General Physics (5cr, 5cr, 5cr)	All	MTH 112	-

# **Experiential Learning or Physiology/Manual Dexterity Elective Course(s)** Select one of the following tracks.

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

Course	Description (Credits)	Term(s)	Pre-requisites	Comments
BI 309 <u>OR</u> BI 409	Teaching Practicum <b>OR</b> Advanced Practicum (1-3cr)	F, W, Sp	Departmental approval required*	*See form here
BI 401	Research and Scholarship (1-3cr)	All	Departmental approval required*	*See form here
BI 410	Internship (1-3cr)	All	Departmental approval required*	*See form here

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

Course	Description (Credits)	Term(s)	Pre-requisites	Comments
BI 451	Functional Anatomy Human Muscular Skeletal System (4cr)	Su	BI 331-333, 341-343	By Application
BI 485	Monster Biology (3cr)	W	BI 311*, BI 370*	*may be taken concurrently
MB 416	Immunology (3cr)	F	BB 450 (D-)	-
MB 436	The Human Microbiome (3cr)	Sp	BB 314 or MB 302	-
Z 425	Embryology and Development (5cr)	F	BI 311, BB 314, Junior standing	-
Z 438	Behavioral Neurobiology (3cr)	Sp	BI 221, 222, 223 (C-) & CH 233/263 (C-)	-
Z 477	Aquatic Entomology (4cr)	W*	BI 221, 222, 223 (C-)	*Alternate years

#### **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 here. 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.

#### **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: Applicants must take the Dental Admissions Test. Sylvan Prometric Centers offer the test in Portland, Eugene, Bend, 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 <u>OSU Leadership Minor</u>.

## **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. Plan to apply with 50+hours of experience. Contact offices and clinics in Corvallis or at home to see what opportunities are available. More on experiences here.

Internships & Volunteering: See the Medical and Health Professions sections of the internships & volunteering list here.

**Summer Programs:** There are summer programs at dental schools designed to support rural, disadvantaged and underrepresented students to gain entrance to professional school. An example is the <u>Summer Health Professions Education Program</u>.

**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. Information on going abroad in BI is here.

Health Care Careers Enrichment Programs: Searchable databases of summer programs to learn what it is like to work in health care or research:

- AAMC Summer Programs
- Explore Health Careers Enrichment Programs
- NAAHP 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. <u>Information on getting research experience</u>.

Pre-Dental Society Information: Joining is encouraged for field trips, visits OHSU, and speakers. Contact predental@oregonstate.edu.

Pre-Dental Listserv: To hear about opportunities, email predental-join@lists.oregonstate.edu using your ONID and reply to the email response.

#### **Additional Pre-Dental Information**

#### **Additional Resources**

- American Dental Association
- American Student Dental Association
- American Dental Education Association
- Biology Careers page: Medicine and Health Careers
- Explore Health Careers
- Furman University Health Care Links
- Oregon Health & Sciences University School of Dentistry
- Oregon Pacific Area Health Education Centers Health Careers