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UNIVERSITY *of* WASHINGTON

SCHOOL OF DENTISTRY: DEPARTMENT OF ORAL HEALTH SCIENCES

GRADUATE STUDENT
HANDBOOK: 2024-2025



BE BOUNDLESS



Table of Contents

School of Dentistry	3
Department of Oral Health Sciences (OHS)	4
Graduate Program	8
Master of Science (Thesis).....	14
Master of Science in Oral Health Sciences for Dental Hygienists (MS DH).....	16
PhD Degree	20
DDS/PhD Dual Degree	24
The Graduate School.....	30
Campus Resources: The Basics.....	31
Diversity Resources.....	31-35
Dental Student Resources	33
National Professional Associations	33
Additional Campus and Community Resources	39
Appendix	43
DEPARTMENT OF ORAL HEALTH SCIENCES General Examination	43
DEPARTMENT OF ORAL HEALTH SCIENCES (OHS): Dissertation Defense	48
DEPARTMENT OF ORAL HEALTH SCIENCES (OHS): Academic Progress Policy.....	48
DEPARTMENT OF ORAL HEALTH SCIENCES (OHS): Grievances Policy.....	55
DEPARTMENT OF ORAL HEALTH SCIENCES (OHS): Graduate Faculty Membership Policy.....	56

UW School of Dentistry

Welcome!

Land Acknowledgement

The University of Washington School of Dentistry is privileged to stand on the land that was first inhabited by the Coast Salish peoples. These include the tribes and bands of the Duwamish, Muckleshoot, Puyallup, Tulalip, Snoqualmie and Suquamish Nations, who have lived and cared for the land since time immemorial.

Strategic Plan (Full information here: <https://dental.washington.edu/strategic-plan/>)

Advancing Oral Health for All

A five-year strategic plan for the School of Dentistry

Mission

To advance oral and craniofacial health as a global leader in collaborative education, personalized patient care, commitment to serving community needs and continuous improvement through discovery and innovation.

Vision

To lead the achievement of optimal population health through accessible oral and craniofacial healthcare for all.

Values

Excellence, Collaboration, Service, Respect, Innovation and Integrity

Student Resources

For an overview of student resources, graduate degrees offered, and student life, please see: <https://dental.washington.edu/students/>

School of Dentistry Intranet

The School of Dentistry Intranet (Sharepoint site) serves a central point for students (though the main focus is the DDS student population), faculty and staff for a variety of policies, procedures, forms, and other key resources at the school.

<https://uwnetid.sharepoint.com/sites/sod/SitePages/home.aspx>

Department of Oral Health Sciences (OHS)

Our Department

The Department of Oral Health Sciences (OHS) brings together faculty from different ends of the dental and oral health research spectrum into a single department that has expertise ranging from the modern experimental life sciences through the public health and behavioral sciences. OHS has the goal of improving the oral and general health and well-being of our diverse global population through research, teaching and service. OHS has a broadly defined mission that accommodates diverse faculty interests and expertise. At present, OHS enjoys faculty expertise in areas including anatomy, biochemistry, molecular biology, microbiology, biostatistics, epidemiology, behavioral science (both basic and applied), public health, dental hygiene, education, law, medicine, and clinical dentistry including faculty members with specialty training in periodontics, orthodontics, and oral medicine. OHS also sponsors the School of Dentistry's only PhD program as well as the combined DDS-PhD program and the Master of Science program in Oral Health Sciences for Dental Hygienists.

Academic Integrity

Students in OHS are expected to uphold the highest standards of academic integrity. Our department expects students to abide by the guidelines on academic misconduct as defined in [Student Governance Policy, Chapter 209 Section 7.C](#) which include cheating, falsification, plagiarism, unauthorized collaboration, and more. Please see full details on the [academic misconduct page](#).

Facilities

Our department is located in the Warren G. Magnuson Health Sciences Center in two offices.

Graduate Programs Office

Magnuson Health Sciences Center, Room B224
1705 NE Pacific Street
Box 357475
Seattle, WA 98195

Main Administrative Office

Magnuson Health Sciences Center, Room B509
1705 NE Pacific Street
Box 357475
Seattle, WA 98195

All UW students and employees are issued a UW ID card, the [Husky Card](#). You will need this card whenever you are asked to verify your UW student status, and it also gives you building access.

University of Washington (UW)

The University of Washington provides a rich environment for interdisciplinary oral health research. Founded in 1861 in Seattle, the University is one of only two in the northwestern states with medical and dental schools. The Institution's medical and dental schools were established in 1945 with a strong research orientation. Despite increased emphasis in recent years on education of primary-care physicians and dentists, the University has been recognized since 1969 as one of the nation's leading research universities. The University of Washington is one of the world's preeminent public universities in impact and funding with \$1.63 Billion in sponsored grants and contracts. Since 1972, the UW has received more federal research funding than any other U.S. public university, and since 1969 consistently placed among the top five for total sponsored research funding for all public and private universities in the country. We have a proud culture of collaboration and discovery that has kept the UW globally competitive.

Health Sciences at the UW includes the Schools of Medicine, Dentistry, Pharmacy, Nursing, Public Health, and Social Work, University Hospital, Harborview Medical Center and other independent but affiliated institutions (including Fred Hutchinson Cancer Research Center, and Seattle Children's Hospital) and 22 interdisciplinary institutes and centers. Most faculty in the School of Dentistry's Department of Oral Health Sciences hold joint or adjunct appointments in the School of Public Health or other schools. This environment has led to strong collaborative relationships across schools and provides access to an unusually broad array of strong scientific investigators. One of the institutional strengths of the University of Washington is the history of interdisciplinary cooperation and collaboration, with more than 285 specialized research centers, which extend beyond the campus and includes the Fred Hutchinson Cancer Research Center, Seattle Children's Hospital, and multiple other institutions in Seattle and throughout the Pacific Northwest states.

School of Dentistry (SOD)

The UW School of Dentistry has approximately 280 pre-doctoral dental students and 120 graduate students and residents, ~200 staff members, with 69 full-time faculty, 40 part-time faculty and ~500 affiliate clinical faculty. The school has specialty programs leading to the Master of Science in Dentistry, or to a Certificate, in Periodontics, Endodontics, Orthodontics, Prosthodontics, Pediatric Dentistry, Oral Pathology and Oral Medicine. There are also three approved residency programs in Oral and Maxillofacial Surgery, Oral Radiology and General Practice. In addition, the school offers MS and PhD degrees (including the combined DDS/PhD) through the Department of Oral Health Sciences. The school has had a strong research training program for dental students for over 40 years. The UW SOD has been a highly favorable milieu for oral health research for decades and is characterized by the broad

distribution of high-level research activity and accomplishment in basic, translational, behavioral, public health and clinical research. The School of Dentistry has been a longstanding leader in behavioral research, despite the high competition for relatively limited funds devoted to this area. A new area of research leadership that has recently evolved is in the public health disciplines of epidemiology and biostatistics.

Oral Health Sciences (OHS)

OHS has 25 full-time faculty members with professional appointments as well as a group of staff research scientists. Faculty members are drawn from various fields including dentistry, the social sciences (health services, epidemiology, global health, psychology, sociology, biostatistics), and the basic sciences (oral biology, developmental biology, microbiology, genetics, anatomy). The department is housed in the Warren G. Magnuson Health Sciences Center and most faculty members hold joint appointments in disciplinary departments in the School of Public Health and Community Medicine or in Psychology and many are also jointly appointed in dental school clinical departments.

Contacts

The core administrative team for the OHS Graduate Program is available to consult on any questions you may have about the program.

Who	Contact Information	Resource
Robert A. Cornell, PhD Graduate Program Director (GPD or GPC) Professor	Health Sciences Center, B224F 206-616-6706 cornellr@uw.edu	Directs the graduate program. Serves as Graduate Program Coordinator (GPC) within MyGrad system.
Jonathan An, DDS, PhD Asst. Graduate Program Director Assistant Professor	Health Sciences Center, B504 206-543-1193 joyan@uw.edu	Assists in the direction of the graduate program.
Lora Brewsaugh, M.Ed. Graduate Program Advisor (GPA)	Health Sciences Center, B224B 206-543-5477 lorab2@uw.edu ohsgrad@uw.edu	Primary contact for all students regarding program policies and procedures. Handles all administrative tasks related to the graduate program including events
Whasun (Sun) Oh Chung, PhD Research Professor and Chair	Health Sciences Center 206-543-4339 sochung@uw.edu	Oversees department faculty and staff
Doug Ramsay, DMD, PhD, MSD Professor	Health Sciences Center 206-616-5427 ramsay@uw.edu	Serves as NIH T90 and R90 PI

Maggie Dean Administrator	Health Sciences Center, B509 206-221-5407 connorm@uw.edu	Department administrator; serves as resource for all department operations. Manages budgets, building access, hiring, space assignments, etc.
Natascha Trias Fiscal Specialist	Health Sciences Center, B509 206-221-9134 ntrias@uw.edu	Purchasing, travel reimbursements, department keys

Communication Tools

General Expectations

One of the keys to being a successful student is to **be proactive in your communication** with faculty and staff. If you are going to be absent for classes or meetings due to travel, health, or other personal issues or if you are struggling with a class or the program for any reason, it is important that you communicate this to your instructor or the graduate program staff so that we can assist you as much as possible.

UW NetID and Email Account

Your UW NetID and password allow you to access your UW information and other online services, including MyUW and UW Email. See more information on [managing your NetID](#). Official UW messages for you will be sent to your UW email address. See more information about [email accounts](#).

It is important that you check your UW email frequently. Please also make sure that any email you send to UW faculty, staff, and listservs are from your UW email address.

OHS Graduate Student Listserv

OHS graduate students receive important announcements and information on the OHS Student Listserv (ohs-sod_students@uw.edu). This listserv is monitored. Students are automatically subscribed to this listserv when they enter the program. It is important that any messages you send through the listserv are from your UW email address or your message may be rejected.

Regular Mail and Campus Mail

Mailing address:
1959 NE Pacific St., B-509
Box 357475
Seattle WA 98195

Inter-campus mail may be sent using a UW box number. The box number for OHS Graduate Programs Office is **Box 357475**. Please note that you cannot have any packages (UPS, FedEx, etc.) delivered to the student spaces.

Directory Information

Through [MyUW](#), students are able to choose whether their directory information can be released to the public. The [UW directory](#) usually includes a student's name, program, phone number, and UW email address. Read more about [directory information](#).

Regardless of your UW directory release settings, basic student information such as your names may be included in a number of departmental communications such as the OHS website. If you would like to update what can be released or have a new personal website you would like to share, please consult with the GPA to resubmit a Consent to Release Basic Information form.

Graduate Program

The OHS Graduate Program is guided by the various University of Washington Graduate School Policies and procedures when creating our own policies and procedures.

Enrollment and Registration

Academic Calendar

Please bookmark [UW's Academic Calendar](#) for the most essential dates surrounding university instruction, registration deadlines, grade deadlines, university holidays, and more!

Registration Process

Registration for classes is done online through [MyUW](#).

Quarterly Time Schedule

The public UW Time Schedule reflects the **quarterly details** of all course offerings across the university. Use the following links to plan your quarterly schedule and view current and upcoming course offerings:

- [OHS Course Catalog and links to current and upcoming Time Schedules](#)
- [The entire UW course catalog](#)
- [UW Time Schedules](#)

Course Add (Entry) Codes

Add codes are unique numbers given to each student enrollee to manage the enrollment of a particular course. OHS students are usually not required to enter an add code to enroll in OHS courses. In the rare event that this occurs, you may contact the GPA for an add code. If you register for a course outside of our department or program that requires an add code, please contact the department offering the course to request an add code.

Faculty Codes

OHS 578 (Research Techniques), OHS 600 (Independent Study/Research), OHS 700 (Thesis), and OHS 800 (Dissertation) require a faculty code to register. Students must arrange the number of credit hours with their research advisor. Once you've done so, you may obtain a faculty code from your advisor or from the GPA.

Course Load Requirements

Full-time quarterly enrollment for graduate students is **10 credits**. Students who hold assistantships (RA, TA) or fellowships (trainees) must register for 10 credits during Autumn, Winter, and Spring quarters. Pre-doctoral trainees are also required to register for 2 credits in Summer quarter. Students holding assistantships Summer Quarter often also have enrollment requirements; *please review your ASE contract carefully*. Read the UW's policy on graduate student enrollment requirements: <https://registrar.washington.edu/registration/policies-procedures/>

International Student Services enrollment info for international students:

<https://iss.washington.edu/academics-f-1/enrollment-requirements-f-1/#:~:text=Undergraduate%20students%20must%20enroll%20in,in%2010%20credits%20each%20quarter.>

Continuous Enrollment/On-Leave Policy

To maintain graduate status, a student must be enrolled on a full-time, part-time, or official on-leave basis from the time of first enrollment in the Graduate School until completion of all requirements for the graduate degree.

If you are interested in going on-leave, please let the GPA know and review the Graduate School's policy and steps required to obtain on-leave status (<https://grad.uw.edu/policies/graduate-on-leave-status/>.) Students are required to file a request for on-leave status via MyGrad so that you maintain graduate status.

Tuition and Financial Aid

Tuition Payments

Student Fiscal Services outlines quarterly tuition due dates and answers questions on tuition: <https://finance.uw.edu/sfs/tuition/duedate>

An overview of current Graduate tuition is noted here in the Graduate Tuition Dashboard: <https://www.washington.edu/opb/tuition-fees/current-tuition-and-fees-dashboards/graduate-tuition-dashboard/>

A helpful FAQ section on tuition and fees can be found here:

<https://www.washington.edu/opb/tuition-fees/tuition-fee-questions/>

Financial Aid

Disclaimer: Departmental Program staff are not specialists or experts in federal financial aid. In addition, the program is not responsible for setting or conveying financial aid policy to its students. It is the responsibility of all students to learn and be aware of financial aid policies that impact them.

The Office of Student Financial Aid (OSFA) (www.washington.edu/financialaid/) can help students field funding issues. Students can apply for various forms of financial aid to help cover their educational costs, including federal financial aid (fafsa.ed.gov), scholarships and private loans. Students on federal financial aid should also investigate the **Public Service Loan Forgiveness program** (studentaid.ed.gov/sa/repay-loans/forgiveness-cancellation/public-service).

Drops, Withdrawals, Forfeitures & Refunds

All deadlines and options surrounding dropping courses and related scheduling matters can be found here: <https://finance.uw.edu/sfs/tuition/forfeiture-refund>

Funding

Below is a non-exhaustive local list of possible funding opportunities for OHS Graduate Students. We encourage students to ask the OHS Graduate Program staff and faculty about funding that may fit well with the degree and research areas each student is pursuing. We also encourage new students to proactively explore GFIS (below) and other potential options.

- [Achievement Rewards for College Scientists \(ARCS\)](#)
- [ADEA Scholarships](#) (MSDH Students)
- [ADHA Scholarships](#) (MSDH Students)
- [GSEE: The Office of Graduate Student Equity and Excellence](#)
- [Graduate Funding Information Services \(GFIS\)](#): database for funding opportunities
- [Graduate Student Conference Presentation Awards](#)
- [Magnuson Scholarship](#)
- [Office of Fellowships and Awards](#)
- SOD [T90/R90 NRSA traineeships](#) may be available to students who are U.S. citizens/permanent residents (T90), or a non-U.S. citizen/permanent resident in pursuit of a PhD, who already holds a dental degree (R90).
- [GPSS Travel Grants](#)

Graduate Funding External Sources

[ProFellow](#)

Program Policies and Procedures- General Policies Applying to OHS Graduate Program

- Please see Appendix Section A for the OHS General Exam Policy
- Please see Appendix Section B for the OHS Dissertation Defense Policy
- Please see Appendix Section C for the OHS Academic Progress Policy
- Please see Appendix Section D for the OHS Grievances Policy
- Please see Appendix Section E for the OHS Graduate Faculty Membership Policy

Student Representative Role

Student participation and representation in governance of the Oral Health Science graduate program is highly valued by our leadership and will allow us to continue to evolve and improve as a program.

- The student representative act as liaisons between graduate students and faculty, communicates regularly with the OHS graduate students to faculty members via email,

chat, or other medium to gather questions, ideas, and concerns regarding the graduate program

- The student representative attends each **monthly faculty meeting** to present and discuss any topics or issues on behalf of the cohort (*meetings are typically held Monday afternoons*)
- As needed, for a particular or pressing matter, the student representative will attend a portion of the weekly Graduate Program Team weekly meetings.
- The Graduate program leadership may request an occasional specific poll/question(s) to be distributed by the student representative to other students, and the representative will report back on peer responses to Graduate leadership.
- On occasion, assist in recruiting prospective graduate students.
- Help welcome incoming graduate students by answering any questions they may have about the program.

Course Descriptions: Core OHS Courses

OHS 201 Planning a Career in Dentistry for the Future (2)

Future-oriented overview of important concepts in dental science, contemporary modes of patient treatment, and dental-care delivery systems. Provides exposure to dentistry as a career and prerequisite materials in oral anatomy, epidemiology, and other basic sciences subjects. Open to all second-, third-, and fourth-year undergraduate students.

OHS 449 Undergraduate Research Topics in Oral Biology (*, max. 30)

Individual research on topics selected in collaboration with a faculty member.

OHS 501 Critical Thinking in OHS: Craniofacial Biology and Oral Health Span (2)

Build critical thinking and peer review skills in oral health sciences through reading and evaluating oral health literature, specifically craniofacial genetics and oral health span.

OHS 502 Critical Thinking in OHS: Oral Microbiome (2)

Build critical thinking and peer review skills in oral health sciences through reading and evaluating oral health literature, specifically oral microbiology.

OHS 503 Critical Thinking in OHS: Clinical Dental Research (2)

Build critical thinking and peer review skills in oral health sciences through reading and evaluating oral health literature, specifically dental public health and clinical research.

OHS 550 P-Directed Studies in Dental Public Health Sciences (*, max. 17)

Students and faculty members who have common academic interests can pursue them together within the curriculum by means of independent study and a tutorial student-faculty relationship. Credit/no-credit only.

OHS 561 Oral Tissue Development, Structure, and Function (3, max. 6)

Selected readings and discussions explore recent advances in cellular and molecular biology relevant to oral biology and medicine. Special emphasis on craniofacial and dental development, oral mucosa and

periodontal tissues, salivary gland function, and olfaction and gustation. Prerequisite: permission of instructor.

OHS 562 Supervised Teaching in Oral Health Sciences (1-5, max. 10)

Directed and guided experience in selected topics in teaching techniques, teaching philosophy, and design of courses given by the Department of Oral Health Sciences. Students are required to participate in lecture and laboratory teaching under the supervision of the course director.

Prerequisite: permission of instructor.

OHS 568 Biostatistics in Dentistry (3)

Introduction to concepts and methods of descriptive and inferential statistics with applications in dentistry emphasized. Topics include comparison of means and proportions, hypothesis testing, confidence intervals, non-parametric methods, linear regression, and correlation. Prerequisite: enrollment in School of Dentistry or permission of instructor. Offered: jointly with BIOST 510.

OHS 575 Oral Health Sciences Seminar (1-3, max. 30)

Presentation and discussion of current research problems by members of the staff, investigators from other departments in the University, visiting scientists, and trainees. Prerequisite: permission of instructor. OHS 578 Research Techniques in Oral Health Sciences (2-4, max. 15)

Introduction to biochemical, analytical, or morphological techniques employed in biochemical cytology or molecular pathology as well as in vitro techniques of tissue and organ culture.

OHS 579 Molecular Biology (2)

Applications of molecular biology and recombinant DNA methodologies to oral health science topics of interest in dental sciences. Prerequisite: BIOC 405 or BIOC 406 or equivalent, and permission of instructor.

OHS 600 Independent Study or Research (variable)

Prerequisite: permission of instructor.

OHS 650 P-Community Dentistry Clinical Electives (variable, max. 12)

Credit/no-credit only.

OHS 700 Master's Thesis (variable)

OHS 800 Doctoral Dissertation (variable)

Master of Science (Thesis)

Plan of Study starting in 2024-2025

MASTER OF SCIENCE (THESIS) DEGREE PROGRAM (ORALB-0-2-5)

Students in this program are expected to gain proficiency in one or more of the basic sciences in addition to gaining expertise in the subject area of oral and craniofacial sciences. This program is suitable for someone interested in a career in dental research, future Ph.D. research or professional dental training. We generally only accept students who have had considerable undergraduate research experience (in a biology, microbiology, or immunology research laboratory for example) or who have worked in research settings after obtaining their undergraduate degree.

Course Requirements. The program requires a minimum of **70 credit hours** (including at least 9 credits of thesis), of which at least 7 credits must be from science courses outside the Oral Health Science curriculum. The program normally takes seven quarters of course work and thesis research.

Thesis Research. A research thesis is required for this M.S. degree. During the first year, each student will be encouraged to spend time in one - three laboratories to gain familiarity with research and to help identify an area of special interest to the student. Once this has been accomplished, an advisor and thesis advisory committee will be appointed, and the student will begin thesis work. The Final Examination will be concerned with the subject matter of the thesis and is conducted as an open seminar followed by examination by the advisory committee.

Teaching. Students are encouraged to take elective courses offered through the Medical Education and/or Oral Health Sciences Supervised Teaching which will help them in their teaching careers

Course Requirements

A. Core Courses (minimum 54 credits). The following courses are mandatory.

Course No.	Course Title	Credit Hrs.	Quarter Offered
OHS 568	Biostatistics	3	S
OHS 501	Critical Thinking in OHS: Craniofacial Biology and Oral Health Span	2	Aut
OHS 502	Critical Thinking in OHS: Oral Microbiome	2	Win
OHS 503	Critical Thinking in OHS: Clinical Dental Research	2	Spr
OHS 575	Oral Health Sciences Seminars	1	A,W,Sp
OHS 578	Research Techniques in Oral Health Sciences (lab rotations)	2-4	A,W,Sp,S
OHS 579	Molecular Biology	2	S
OHS 600	Independent Study/Research	Var	A,W,Sp,S
OHS 700	Master's Thesis (minimum of 9 credits required)	var	A,W,Sp,S

B. Available Electives. Students must take at least 7 credit hours from science courses outside OHS. This list is not meant to be exhaustive. Consult with the Graduate Program Director for potential approval of substitutions.

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>	<u>Quarter Offered</u>
BIOC 530	Introduction to Structural Biology	3	A
BIOL 411	Developmental Biology	4	A, W
OHS 571	Clinical Epidemiology and Study Design in Dentistry	2	S
IMMUN 532	Innate and Adaptive Immunity in Disease	4	W
MICROM 411	Bacterial Genetics	4	W
MICROM/IMMUNO 441	Intro to Immunology	4	A
MICROM 445	Medical Virology	2	Sp
MICROM 553	Interactions of Bacteria with their Hosts	3	Sp (odd years)
NEUSCI 401	Neuroscience	3	A
NEUSCI 402	Diseases of the Nervous System	3	W
NEUSCI 403	Computational Models for Cognitive Neuroscience	3	W
NEUSCI 404	Neuropharmacology	3	Sp
ORTHO 580	Cranial Anatomy	3	S
PABIO 551	Biochemistry & Genetics of Pathogens & Hosts	4	A
PABIO 552	Cell Biology of Human Pathogens & Disease	4	W
PABIO 550	Diseases and Issues in Global Health	2	A
PABIO 536	Bioinformatics and Gene Sequencing Analysis	3	Sp
PERIO 575	Oral Immunology	2	A, odd yrs
UCONJ 647	Antiracism in Action for Health Professionals	1	A,W,Sp

C. Other possible electives:

DENTPC 564, 565	Clinical and Histopathological Correlation	2	A,W,Sp,S
DENTFN 523	Oral Histology and Embryology	3,3	W,Sp
DENTPC 574	Oral Pathology	4	W

D. To prepare for teaching, students may take at least one class on educational methods. In addition, students may train undergraduate students enrolled in OHS 449 (Undergraduate Research). Consult with your PI. Such credits will not fulfill the requirement for non-OHS science courses but will count toward the total credits required. Suggested courses include, but are not limited to:

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>	<u>Quarter Offered</u>
BIME 520	Teaching Methods in Medical Education	2	Varies
BIME 521	Evaluation of Learning in Health Sciences	3	Varies

OHS 562	Supervised Teaching in OHS	Max 10	A,W,Sp,S
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D. Sample Distribution of Courses for the M.S. Degree Program.

Oral Health Sciences	55 credit hours
Dent. Public Health Sci.	5 credit hours
Recommended Electives	7credit hours
Teaching Electives	3 credit hours

E. Students are also required to attend and participate in the Biomedical Research Integrity Series. This is a non-credit summer course taught through the Department of Bioethics and Humanities and consists of a series of lectures and discussion groups. Each student will need to attend a minimum of three lectures and three discussion groups. NIH Trainees are required to attend every year for the duration of their federal funding.

MS (Thesis) Policies

Please review all the Graduate School's Master's Degree policies here, which include degree completion, thesis program policies and more.

<https://grad.uw.edu/policies/1-1-graduate-degree-requirements/>

Also, the Graduate School has a Thesis/Dissertation submission policy, including ETD submissions requirements, deadline, formatting requirements and more:

<https://grad.uw.edu/current-students/enrollment-through-graduation/thesis-dissertation/>

Master of Science in Oral Health Sciences for Dental Hygienists (MS DH)

Plan of Study **starting 2024-2025**

MASTER OF SCIENCE IN ORAL HEALTH SCIENCES FOR DENTAL HYGIENISTS (ORALB-0-2-5)

The intent of this two-year program is to train dental hygienists to teach relevant basic and applied science courses (e.g., oral histology, oral pathology) in dental hygiene programs. Completion of the required courses normally takes 8 quarters and requires a minimum of **70 credits**.

Course Requirements. The overall goal of the program is to train dental hygienists to be educators and teachers. Students receive comprehensive training in many of the basic and applied (clinical) sciences, participate in clinical care of special needs patients, and in a research project. The program is non-thesis, but students will be required to complete a capstone research project.

A. Core Courses. The following courses are mandatory program requirements.

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>	<u>Quarter Offered</u>
P BIO 375, 376	Human Physiology	4,4	A,W
DENTFN 513	Oral Microbiology	2	A
DENTFN 523/533	Oral Histology & Embryology 1 and 2	3,3	W, Sp
DENTPC 534, 554, 574	Oral Pathology Intro, Part 1, Part 2	3,2,4	Sp, S, W
OHS 575	Oral Health Sciences Seminar	1,1,1	A, W, Sp
OHS 502	Critical Thinking in OHS: Oral Microbiome	2	W
OHS 568	Biostatistics in Dentistry	3	S
OHS 571	Clinical Epidemiology & Study Design	2	S
BIME 520	Teaching Methods in Medical Education	2	Varies
D HYG 500	Dental Hygiene Seminar	1	Varies
D HYG 501	Capstone 1	2-4	Varies
D HYG 502	Capstone 2	2-4	Varies
D HYG 503	Capstone 3	2-4	Varies
OHS 579	Molecular Biology	2	S
ORTHO 580	Cranial Anatomy	2	S

*Note that some of these requirements may be waived dependent upon previous coursework.

The Capstone Project (minimum of six (6) credits required) will provide the student with the opportunity to demonstrate their mastery of the basic and applied oral biology science curricular concepts, by integrating their acquired knowledge and skills into a research project that is applicable to their individual interest or future career goals.

B. Available Teaching Electives:

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>	<u>Quarter Offered</u>
BIME 521	Evaluation of Learning in Health Sciences	3	Varies
OHS 562	Supervised Teaching in Oral Health Sciences	1-5	A, W, Sp, S
D HYG 595	Teaching Internship	1-4	A, W, Sp
GRDSCH 630	Special Topics in College/University Teaching	2	S

C. Other electives.

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>	<u>Quarter Offered</u>
OHS 501	Critical Thinking in OHS: Craniofacial Biology and Oral Health Span	2	A
OHS 503	Critical Thinking in OHS: Clinical Dental Research	2	Sp
OHS 578	Research Techniques	2-4	A, W, Sp, S

ORALM 576	Oral Medicine Literature Review	1	A, W, Sp, S
ORALM 601	Oral Medicine Research Seminar	1	A, W, Sp, S
DENTPC 553	Local Anesthesia	3	Sp
DENTPC 511	Introduction to Periodontics	2	A

D. Clinical opportunities are available in the DECOD (Dental Education in Care of Persons with Disabilities).

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>	<u>Quarter Offered</u>
ORALM 404	Considerations in Care of Patient with a Disability	variable	A, W, Sp, S
ORALM 460	Clinical Management of Patients with Disabilities	variable	A, W, Sp, S
DENTGP 653, 663, 673, 683	Treatment of Patients with Special Needs	2	A, W, Sp

E. Students are also required to attend and participate in the Biomedical Research Integrity Series. This is a non-credit summer course taught through the Department of Bioethics and Humanities and consists of a series of lectures and discussion groups. Each student will need to attend a minimum of three lectures and three discussion groups. NIH Trainees are required to attend every year for the duration of their federal funding.

MS (DH) Policies

Please review all the Graduate School's Master's Degree policies here, which include degree completion, thesis program policies and more.

<https://grad.uw.edu/policies/1-1-graduate-degree-requirements/>

PhD Degree

Plan of Study **Starting in 2024-2025**

THE DOCTOR OF PHILOSOPHY DEGREE PROGRAM (ORALB-0-4-1)

Ph.D. Program Description

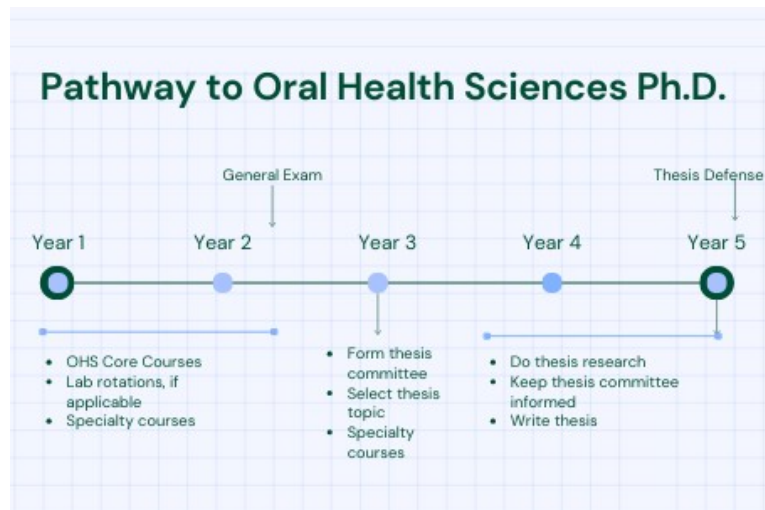
The Oral Health Science Ph.D. program usually requires five years. Students are expected to devote the full twelve-month year to their graduate work (allowing time for vacation and holidays). Graduate students will have the opportunity to assist in the teaching program of the department as a practical means of gaining experience in the presentation of lectures and laboratory work.

Course Requirements. The course requirement is a minimum of 90 credits (including at least 27 credits of thesis). Core Courses (minimum 48 credits); Through their coursework, students are expected to gain proficiency in one or more basic biologic sciences and to master modern biological approaches in addition to gaining expertise in the subject area of oral and craniofacial sciences. At least 19 credit hours must come from courses in departments other than Oral Health Sciences, and of the 19, 12 must be science courses:

- **Minimum 6 credits CONJ or PABIO courses**
- **Minimum 6 credits non-OHS science courses**
- **One non-science course**

These will include courses offered through the Molecular and Cell Biology Program and courses selected to match the basic science interests of the student. Cross-disciplinary training in Bioengineering is also available. Courses in the School of Public Health such as the Epidemiology series are also available to students interested in Dental Public Health research. All graduate students are also expected to attend and participate in departmental seminars (OHS 575).

The following is an approximate timeline for completion of the PhD degree. Because each student's program and research goals will vary, completion of the requirements for the PhD degree may not necessarily follow this timeline.



Year 1

Initial Course Work. All new students meet with the Graduate Program Coordinator before the start of classes in the Autumn Quarter to consider the student's course work. The selection of courses will depend on the student's background, research goals, and interests.

Research Rotation. During each quarter of the first year of graduate study, the student may register for OHS 578, Research Techniques. The purpose of this course is for students to carry out research projects with 1-2 faculty members to prepare for the choice of their PhD project mentor or to learn a variety of research methods.

Year 2

Course Work. Students will continue to take courses that will include the remainder of the core courses required in Oral Health Sciences and courses in other disciplines relevant to the student's dissertation research.

Teaching. Students are encouraged to take elective courses offered through the Medical Education and Graduate School which will help them in their future teaching careers. Also, beginning in the second year, graduate students will have the opportunity to take part in teaching one of the Department courses for undergraduate dental students. This experience prepares students for teaching responsibilities after receipt of the PhD and provides a good opportunity for consolidation of the student's general oral biology background.

Research. Early in the second year of study, the student is expected to choose a thesis adviser and to define a dissertation problem.

The Supervisory Committee. Once a thesis mentor and research direction have been chosen, the student and mentor will select a Supervisory Committee. This should be done in year two of the training. The committee is composed of at least four faculty members, at least three of whom (Including the Chair and the Graduate School Representative) must be members of the Graduate Faculty with an endorsement to chair doctoral committees. The Graduate Program Coordinator will forward the list of recommended committee members to the Dean of the Graduate School who will officially appoint the Supervisory Committee. In accordance with Graduate School regulations, the Supervisory Committee will be responsible for advising and directing the student throughout the PhD program.

The General Examination. Late in the second year, the student will take the General Examination. This examination is in the format of a written research grant proposal that is presented to the PhD supervisory committee. All required coursework must be completed at this time. The purposes of this examination are (1) to determine whether the student is capable of recognizing an important research question in oral and craniofacial sciences, (2) to determine whether the student is able to develop this question into a comprehensive proposal complete with preliminary findings and suggested methods of procedure, and to orally defend the proposal, and (3) to provide the student an opportunity to receive feedback from the Supervisory Committee on the proposed research project.

Years 3 to Completion

The student will primarily engage in thesis research and additional advanced coursework.

The Dissertation and the Dissertation Examination. When the candidate has completed the research project, written the dissertation, and had it approved by the reading committee, the mentor will obtain approval from the Graduate School and set a date for the Final Examination. The Final Examination will be concerned principally with the subject matter of the dissertation and is conducted as an open seminar followed by examination by the Supervisory Committee.

The research project for the PhD dissertation will be chosen by the candidate and adviser and be approved by the candidate’s Supervisory Committee. The research must represent a worthy and fundamental contribution showing originality in concept and implementation

A. Core Courses. The following courses are mandatory program requirements.

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>	<u>Quarter Offered</u>
OHS 501	Critical Thinking in OHS: Craniofacial Biology and Oral Health Span	2	Aut
OHS 502	Critical Thinking in OHS: Oral Microbiome	2	Win
OHS 503	Critical Thinking in OHS: Clinical Dental Research	2	Spr
OHS 568	Biostatistics in Dentistry	3	S
OHS 575	Oral Health Sciences Seminars	1	A,W,Sp
OHS 578	Research Techniques in OHS	2-4	A,W,Sp,S
OHS 579	Molecular Biology	2	S
OHS 600	Independent Study/Research	var	A,W,Sp,S
OHS 800	Doctoral Dissertation (a minimum of 27 credits needed)	var	A,W,Sp,S

 Students must also take at least 6 credits from the School of Medicine (CONJ) or Bioinformatics (PABIO credits). Because these courses are from outside Oral Health Sciences, they can be applied to the non-OHS science requirement of 12 credits.

B. Following is an example list of the CONJ/UCONJ/PABIO offerings:

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hours</u>	<u>Quarter</u>
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			Offered- subject to change
CONJ 504	Molecular Medicine	1 ½	Sp
CONJ 524	Structural Basis of Signal Transduction	1 1/2	W
CONJ 526	Systems Biology	1 1/2	W
CONJ 530	Directing Stem Cells Towards Regenerative Med	3	Sp
CONJ 531	Signaling Mechanisms in Excitable Cells	1 1/2	A
CONJ 532	Signal Transduction	2	A
CONJ 533	Dynamic Chromosome	1 1/2	A
CONJ 534	Problems in Nervous System Development	1 1/2	W
CONJ 537	Mechanism of Transcriptional Regulations	1 1/2	A
CONJ 539	Modern Approaches to Vaccines	1 1/2	Sp
CONJ 541	Molecular Biology of Cellular Process	1 1/2	Sp
CONJ 542	Cell Biology of Development	3	W
CONJ 544	Protein, Structure, Modification, Regulation	1 1/2	W
CONJ 545	Molecular Interactions and Medicine	1 1/2	Sp
CONJ 546	Survey of Technologies for Molecular Biology	1 1/2	A
CONJ 548	Modeling Proteins and Proteomes	1 1/2	W
CONJ 549	Microbial Population Biology	1 1/2	W
CONJ 550	Clinical Infectious Diseases	3	W
CONJ 551	Immunity	1 1/2	Sp
CONJ 552	Metabolic Flexibility in Biology	1 1/2	A
CONJ 557	Microbial Evolution	2	Sp
CONJ 558	Prokaryotic Biology	1 ½	W
CONJ 583	Molecular Targets in Cancer	1 ½	A
PABIO 536	Bioinformatics & Gene Sequence Analysis	3	Sp
UCONJ 647	Antiracism in Action for Healthcare Prof.	1	A,W,Sp

C. Recommendations for prerequisites

Some students may need to take some lower-level division courses in order to prepare for required classes. See the following list for suggestions:

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>	<u>Quarter Offered- subject to change</u>
<i>BIOC 405</i>	<i>Introduction to Biochemistry</i>	3	A
<i>BIOC 406</i>	<i>Introduction to Biochemistry</i>	3	W
<i>BIOL 411</i>	<i>Developmental Biology</i>	4	A,W
<i>MICROM 411</i>	<i>Bacterial Genetics</i>	5	W
<i>IMMUN/MICRO 441</i>	<i>Introduction to Immunology</i>	4	A

D. Other electives

Other non-OHS science electives students are expected to take include courses in bioengineering, epidemiology, immunology, or other basic biological/medical sciences as appropriate for their research interests. **At least 6 such credits are required.** The student will work with the Graduate Program Director and their mentor to select appropriate elective courses in their chosen basic biological science pathway. The list below is not meant to be exhaustive. Consult with the Graduate Program Director for potential approval of substitutions.

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>	<u>Quarter Offered- subject to change</u>
BIOC 530	Intro to Structural Biology	3	A
BIOEN 501	Molecular Bioengineering	4	varies
BIOEN 502	Cellular Bioengineering	4	varies
OHS 571	Clinical Epidemiology	2	S
GENOME 551	Gene Regulation	1 1/2	varies
GENOME 552	Genomic Analysis	1 1/2	A
GENOME 553	Advanced Genomic Analysis	1 1/2	varies
IMMUN 532	Innate and Adaptive Immunity in Disease	4	W
MCB 532	Human Pathogenic Viruses	3	A
MICROM/IMMUN 441	Intro to Immunology	4	A
MICROM 445	Medical Virology	2	Sp
MICROM 553	Interactions of Bacteria and their Hosts	3	Sp, odd yrs
NEUSCI 401	Neuroscience	3	Sp
NEUSCI 402	Diseases of the Nervous System	3	W
NEUSCI 403	Computational Models for Cognitive Neuroscience	3	W
NEUSCI 404	Neuropharmacology	3	Sp
PABIO 551	Biochemistry & Genetics of Proteins & Hosts	4	A
PABIO 552	Cell Biology of Human Pathogens & Disease	4	W
PABIO 553	Survival Skills for Scientific Research	2	W
ORTHO 580	Cranial Anatomy	2	S
PERIO 575	Oral Immunology	2	A, odd yrs

E. Other Oral Health Sciences Electives:

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>	<u>Quarter Offered</u>
DENTPC 564, 565 (Yr 1 = 564; Yr 2 = 565) (Yr 1 = 564; Yr 2 = 565)	Clinical & Histopathological Correlation	2	Au,W,Sp,S
DENTPC 534	Oral Pathology	3	Sp

F. To prepare for teaching, students may take at least one class on educational methods. In addition, students may train undergraduate students enrolled in OHS 449 (Undergraduate Research). Consult with

your PI. Such credits will not fulfill the requirement for non-OHS science courses but will count toward the total credits required. Suggested courses include, but are not limited to:

<u>Course No.</u>	<u>Course Title</u>	<u>Credit Hrs.</u>	<u>Quarter Offered</u>
BIME 520	Teaching Methods in Medical Education	2	varies
BIME 521	Evaluation of Learning in Health Sciences	3	varies
OHS 562	Supervised Teaching in OHS	Var	A,W,Sp,S

G. Students are also required to attend and participate in the Biomedical Research Integrity Series. This is a non-credit summer course taught through the Department of Bioethics and Humanities and consists of a series of lectures and discussion groups. Each student will need to attend a minimum of three lectures and three discussion groups. NIH Trainees are required to attend every year for the duration of their federal funding.

Doctoral Degree Policies

Please see Appendix Section B for the OHS General Exam Instructions.

Please see Appendix Section C for the OHS Dissertation Defense Instructions.

Please review **all** the Graduate School’s Doctoral degree policies here, which include degree completion and other critical policies.

<https://grad.uw.edu/policies/1-1-graduate-degree-requirements/>

Doctoral Supervisory Committee: <https://grad.uw.edu/policies/4-2-supervisory-committee-for-graduate-students/>

General Exam: <https://grad.uw.edu/policies/1-1-graduate-degree-requirements/>

Also, please review Appendix Section A for the OHS General Exam Instructions document.

Doctoral Reading Committee: <https://grad.uw.edu/policies/4-2-supervisory-committee-for-graduate-students/>

Final Exam: <https://grad.uw.edu/policies/final-examination-dissertation-defense/>

Also, the Graduate School has a Thesis/Dissertation submission policy, including ETD submissions requirements, deadline, formatting requirements and more:

<https://grad.uw.edu/current-students/enrollment-through-graduation/thesis-dissertation/>

DDS/PhD Dual Degree

Plan of Study starting 2024-2025

D.D.S./Ph.D. DEGREE PROGRAM (DENT C-0-4-1 and ORALB-0-4-1)

D.D.S./Ph.D. Program Description

DDS/PhD combined training is available for students committed to an academic or research career in dentistry and dental research. This program is a minimum of 8 years, combining the [DDS curriculum](#) with a PhD in Oral Health Sciences (OHS).

Curriculum Milestones

Academic year 1	Dental Curriculum	
Academic year 2	Dental Curriculum Required SURF project (Research Rotation #1)	
Academic year 3	Dental Curriculum	
Academic year 4	Dental Curriculum Required Summer Quarter Research Rotation #2 (OHS 550)	Integrated National Boards Clinical Licensure Exam and complete DDS
Academic year 5	PhD Coursework & Research	Identify PhD mentor
Academic year 6-7 Clinical Practice	PhD Research Complete remaining PhD coursework Write F30 proposal	PhD General Exam
Academic year 8-9 Clinical Practice	PhD Research	PhD Defense and Graduation

Note: This is a general outline of the DDS/PhD curriculum and may vary depending on the individual student, for example, didactic and clinical performance, research progress, etc.

Curriculum Requirements

A. Core Courses for DDS/PhD (minimum 56 credits). The following courses are mandatory:

OHS 501 Critical Thinking in OHS: Craniofacial Biology and Oral Health Span (2)

Build critical thinking and peer review skills in oral health sciences through reading and evaluating oral health literature, specifically craniofacial genetics and oral health span.

OHS 502 Critical Thinking in OHS: Oral Microbiome (2)

Build critical thinking and peer review skills in oral health sciences through reading and evaluating oral health literature, specifically oral microbiology.

OHS 503 Critical Thinking in OHS: Clinical Dental Research (2)

Build critical thinking and peer review skills in oral health sciences through reading and evaluating oral health literature, specifically dental public health and clinical research.

OHS 550P- Directed Studies in Dental Public Health Sciences (*, Maximum 17)

Students and faculty members who have common academic interests can pursue them together within the curriculum by means of independent study and a tutorial student-faculty relationship. Credit/no-credit only. Offered: AWSpS.

OHS 568 Biostatistics in Dentistry (3)

Introduction to concepts and methods of descriptive and inferential statistics with applications in dentistry emphasized. Topics include comparison of means and proportions, hypothesis testing, confidence intervals, non-parametric methods, linear regression, and correlation. Offered: S

OHS 575 Oral Health Sciences Seminar (1, max. 30)

Presentation and discussion of current research problems by members of the staff, investigators from other departments in the University, visiting scientists, and trainees. Offered: A, W, Sp

OHS 578 Research Techniques in Oral Health Sciences (2-4, max. 15)

Introduction to biochemical, analytical, or morphological techniques employed in biochemical cytology or molecular pathology as well as in vitro techniques of tissue and organ culture. Offered: A, W, Sp, S

OHS 579 Molecular Biology (2)

Applications of molecular biology and recombinant DNA methodologies to oral biology topics of interest in dental sciences. Prerequisite: BIOCHEM 405 or BIOCHEM 406 or equivalent, and permission of instructor. Offered: S.

OHS 600 Independent Study or Research (varies)

Prerequisite: permission of instructor. Offered: AWSpS.

OHS 800 Doctoral Dissertation (varies) (minimum of 27 credits required for degree completion)

Offered: AWSpS

DENTEL 530 Research Seminar (completed during DDS training) (2)

DENTFN 513 Oral Microbiology (completed during DDS training) (2)

DENTFN 523 Oral Histology and Embryology (completed during DDS training) (3)
DENTFN 533 Oral Histology and Embryology 2 (completed during DDS training) (3)

B. Required Electives: At least seven (7) credits conjoint (CONJ/UCONJ) courses or other electives offered outside of OHS. Courses include but are not limited to:

PABIO 536 Bioinformatics and Gene Sequence Analysis (3)

Nature and relevance of molecular sequence information, computer-based protein, and DNA sequence analysis, molecular sequence and genomic databases, and methods for database accession and interrogation.

CONJ 524 Structural Basis of Signal Transduction (1.5)

Focuses on the structure-function relationship of key enzymes in signal transduction (protein/lipid kinases; phosphatases etc.) and the structural consequences of protein phosphorylation. Teaches students to look into critical structural details using PC or Mac. Prerequisite: undergraduate course in biochemistry and basic cell biology, or permission of instructor. Offered: W.

CONJ 526 Systems Biology (1.5)

Covers philosophy of systems biology, experimental design, and the linkages between discovery and hypothesis driven science. Reviews quantitative systems biology tools for genomics, proteomics, modeling and data integration, and emerging technologies. Offered: W.

CONJ 530 Directing Stem Cells Toward Regenerative Medical (3)

An introduction to the rapidly developing field of human embryonic stem cells in regenerative medicine crossing all medical disciplines including ethics. A strong background in biological sciences is required. Offered: Sp.

CONJ 531 Signaling Mechanisms in Excitable Cells (1.5)

Membrane electricity. Structure and roles of voltage-gated and ligand-gated ion channels in electrical signaling. Calcium as a second messenger. Exocytosis and its regulation. Phototransduction in photoreceptors. Prerequisite: comprehensive undergraduate course in general biochemistry and molecular biology, or permission of instructor. Offered: A.

CONJ 532 Signal Transduction (2)

Intracellular signaling pathways leading from cell membrane receptors to nucleus. Pathways activated by seven transmembrane receptors and G-proteins, insulin/PI3 kinase, nitric oxide and WNTs and mechanisms of signal termination. Cytokine/Jak/Stat signaling and role of subcellular localization in signal transduction. Prerequisite: basic knowledge of biochemistry. Offered: A.

CONJ 533 The Dynamic Chromosome (1.5)

The chromosome viewed as the ultimate organelle. How chromosomes are maintained and propagated. Epigenetic regulation of genes. Genetic, biochemical, and cytologic methods for understanding chromosome functions. Prerequisite: cell biology, biochemistry, and genetics. Offered: A.

CONJ 534 Selected Problems in Nervous System Development (1.5)

Introduces students to current issues in developmental neurobiology. Topics include regionalization of the neuroectoderm, mechanisms of neurogenesis, axon patterning and plasticity, and cell death. Not intended to be comprehensive; examines the experimental basis for current views in the field of a few topical issues. Offered: W

CONJ 537 Mechanism of Transcriptional Regulations (1.5) *Tsukiyama*

Focuses on biochemical mechanisms of gene transcription covering a broad range of transcriptional regulation, including mechanisms of transcriptional initiation, elongation and termination. Discusses regulation of transcription by chromatin. Includes a special lecture regarding regulation of transcription in cell growth and differentiation. Offered: A.

CONJ 538 Genetic Instability and Cancer (1/1.5)

Seminar focusing on molecular pathways that maintain genomic stability in all cells and that carry out programmed changes in genomic structure in the immune system. Special attention devoted to understanding how failure in these pathways leads to genomic instability and malignancy. Prerequisite: permission of instructor.

CONJ 539 Modern Approach to Vaccines (1.5)

Lecture/discussion on cellular and molecular mechanisms underlying phenotypes associated with cancer, including genetic pre-disposition, injury, and instability; alteration in control of cell division and cell death; failure of differentiation; tumor angiogenesis and metastasis. Molecular biology of tractable model systems is emphasized. Prerequisite: introductory biochemistry and cell biology. Offered: S.

CONJ 540 Basic Science of Urologic Complications (3)

Introduction to the multidisciplinary nature of the most common urologic complications ranging from prostate cancer to erectile dysfunction. Covers epidemiology, clinical and surgical treatments, current dogmas and approaches/models in basic study of underlying disease mechanisms, and a journal review of each complication. Prerequisite: biological science course.

CONJ 541 Molecular Biology of Cellular Processes (1.5)

Translational control; cytoskeleton and molecular motors; protein targeting, sorting and secretion; apoptosis; regulation of cell function by extracellular matrix. Prerequisite: comprehensive undergraduate course in biochemistry and molecular biology or permission of instructor. Offered: Sp.

CONJ 542 Development (3)

Molecular mechanisms of development; molecules and pathways used for the patterning of developing organisms. Similarities and differences in the making of plants, invertebrates, and vertebrates. Prerequisite: Comprehensive undergraduate courses in Biology, Molecular Biology, or permission of instructor. Offered: W.

CONJ 544 Protein Structure, Modification and Regulation (1.5)

Overview of general principles of protein structure, including forces that contribute to folding and stabilization, followed by an extended coverage of the means by which protein structure and function are modified and regulated. Examples from recent developments in protein folding, processing, and allosteric regulation. Prerequisite: introductory biochemistry and cell biology.

CONJ 545 Molecular Interactions and Medicine (1.5)

Forces governing molecular interactions in biology; with a focus on medicine. Principles of computer modeling techniques in use for predicting the molecular behavior of proteins, ligands and their complexes. In computer ligand discovery; drug design, and the understanding at the atomic level of some genetic diseases. Two computer lab sessions. Offered: Sp.

CONJ 546 Survey of Technologies for Molecular Biology (1.5)

Provides a broad overview of modern technologies used in molecular biology with particular emphasis on DNA sequencing and gene expression. In addition to methods and applications for the technologies, examines the theoretical basis and underlying instrumentation through which these technologies are implemented. Offered: A.

CONJ 547 Molecular Evolution of Viral-Host Interactions (1.5)

Focuses on the interactions between viruses and the cells they infect, with special emphasis on evolutionary battle that occurs between the invading virus and its host. Examines new technologies being used to molecularly dissect virus-host interactions. Offered: Sp.

CONJ 548 Modeling Proteins and Proteomes (1.5)

Provides hands-on experience for modeling protein structures, using the models to predict function, and applying the prediction methods to all proteins encoded by an organismal genome. Provides an overview of protein structure, how it mediates function, and its importance for understanding protein interaction networks. Focuses on the technologies involved for protein structure modeling. Offered: W.

CONJ 549 Microbial Population Biology (1.5)

Principles of ecology and evolution as they apply to microorganisms. Prerequisite: advanced undergraduates with permission of instructor. Offered: even years; Sp.

CONJ 551 Immunity (1.5)

Provides an understanding of the central cellular and molecular players in the mammalian immune system at a level appropriate for the non-specializing graduate student. Selected topics include the molecular basis of B and T cell activation and effector functions and the mechanisms of innate immunity. Offered: Sp.

CONJ 552 Metabolic Flexibility in Biology (1.5)

Focuses on small molecules and the ways that chemistry of these molecules facilitates life under changing conditions. Includes systems from microbiology to human physiology to understand aspects of cancer, aging, and animation. Explores topics including bioenergetics/metabolic flux, adaptation, and allometric scaling. Prerequisite: undergraduate organic chemistry and biochemistry

D. Biomedical Research Integrity Series

Students are also required to attend and participate in the Biomedical Research Integrity Series. This is a non-credit summer course taught through the Department of Medical History & Ethics and consists of a series of lectures and discussion groups. Each student will need to attend a minimum of three lectures and three discussion groups. **NIH Trainees are required to attend every year for the duration of their federal funding.**

DDS/PhD Policies regarding the PhD Portion of the Degree

Doctoral Degree Policies

Please see Appendix Section B for the OHS General Exam Instructions.

Please see Appendix Section C for the OHS Dissertation Defense Instructions.

Please review **all** the Graduate School's Doctoral degree policies here, which include degree completion and other critical policies.

<https://grad.uw.edu/policies/1-1-graduate-degree-requirements/>

Doctoral Supervisory Committee: <https://grad.uw.edu/policies/4-2-supervisory-committee-for-graduate-students/>

General Exam: <https://grad.uw.edu/policies/1-1-graduate-degree-requirements/>

Also, please review Appendix Section A for the OHS General Exam Instructions document.

Doctoral Reading Committee: <https://grad.uw.edu/policies/4-2-supervisory-committee-for-graduate-students/>

Final Exam: <https://grad.uw.edu/policies/final-examination-dissertation-defense/>

Also, the Graduate School has a Thesis/Dissertation submission policy, including ETD submissions requirements, deadline, formatting requirements and more:

<https://grad.uw.edu/current-students/enrollment-through-graduation/thesis-dissertation/>

The Graduate School – Essential Information

The [Graduate School website](#) provides important information for graduate students and postdocs including degree requirements, policies and procedures, information on fellowships, assistantships, and awards, and resources for professional development. Students are responsible for reviewing their [policies and procedures](#), especially pertaining to degree completion. The OHS Graduate Program is guided by the various Graduate School Policies and procedures when creating our own policies and procedures.

Degree Requirements

See this section for some policy and calendar resources to assist students in their progress.

[U501: Graduate School Orientation](#)

Please see this helpful, self-guided, online orientation resource, U501!

[Office of Graduate Student Affairs](#)

This team supports UW graduate students' journeys via online resources, events and workshops.

[MyGrad Program](#)

The MyGrad tool serves as an administrative portal to manage processes and milestones throughout graduate school.

[Thesis/Dissertation](#)

Students are required to submit an electronic thesis or dissertation and a Committee Approval Form to the Graduate School in order to graduate with a master's or doctoral degree. The Graduate School website details all submission guidelines on their website.

Campus Resources: Essential Information

Academic Calendar

The UW Academic Calendar (<http://www.washington.edu/students/reg/calendar.html>) lists critical dates for university holidays, class registration and tuition payment.

Campus Safety

SafeCampus is the UW's violence-prevention and response program. Please contact them anytime to anonymously discuss any safety and well-being concerns for yourself or others.

<https://www.washington.edu/safecampus/>

Call 24 hours/7 days a week: 206-685-7233

UW Alert

Students may enroll in UW Alert. This free service will text and email news of emergencies happening on campus or if campus operations, including classes, are suspended for reasons like adverse weather.

www.washington.edu/safety/alert/

UW Police

Emergency: 911
Non-Emergency: 206-685-UWPD (8973)
Anonymous Tips: 206-685-TIPS (8477)
Business: 206-543-0507
Email: uwpolice@uw.edu
3939 15th Ave NE, Seattle, WA 98105

COVID-19

The most comprehensive UW information on the novel coronavirus and COVID-19 is here:
<https://www.washington.edu/coronavirus/>

Disability Resources for Students

Disability Resources for Students (DRS) arranges academic accommodation for enrolled students. Students with access needs are responsible for requesting the accommodation(s) they need to fulfill the course and degree requirements. Services must be arranged in advance and require documentation of the disability, verifying the need for such accommodation or service. Technical and adaptive equipment is available through both the Disability Resources for Students Office and Desktop Computing Services. To request accommodation for the academic program, please visit the DRS website to start the process. To request disability accommodation to attend events, contact the Disability Services Office (DSO); 206-543-6450. See statements on Equal Opportunity and Affirmative Action and Special Accommodations.

011 Mary Gates Hall, Box 352808 | 206.543.8924 (voice and relay), 206.616.8379 (FAX)
uwdss@uw.edu | depts.washington.edu/uwdrs/

Equity, Justice and Diversity

Various initiatives on equity, diversity and justice are present on UW's campus.

University wide information:

https://www.washington.edu/diversity/?utm_source=whitebar&utm_medium=click&utm_campaign=about&utm_term=diversity

Graduate School information:

<https://grad.uw.edu/equity-justice/equity-justice-in-graduate-education/>

Office of Graduate Student Equity and Excellence

GSEE is at the heart of the Graduate School's commitment to expanding graduate education to underrepresented minoritized (URM) communities. GSEE will continue to be a partner

with you in supporting underrepresented graduate students of color. In the long term, as GSEE continues to provide invaluable direct-to-student programming, GSEE will also focus on improving departmental climate and equity for our students in their academic homes. In short, it will be a rejuvenated focus on not only supporting historically underserved students but also on seeding institutional change.

<https://grad.uw.edu/equity-justice/gsee-graduate-student-equity-excellence/>

School of Dentistry Office of Educational Partnerships and Diversity information:

<https://dental.washington.edu/oepd/>

School of Dentistry's Diversity, Inclusion and Equity Affinity Group

The affinity group is an informal monthly gathering space for faculty, staff, residents, graduate students and predoctoral students to expand and share their perspectives on all dimensions of diversity and equity, and to explore opportunities for members to be more inclusive and equitable in our work at the School, University and community. The group is open to everyone in the School. Please inquire with the OHS GPA to join.

Dental Student Resources

- [American Student Dental Association \(ASDA\)](#)
- [Hispanic Student Dental Association \(HSDA\)](#)

National Professional Associations

- [American Dental Association](#)
- [American Dental Education Association \(ADEA\)](#)
- [Hispanic Dental Association \(HDA\)](#)
- [National Dental Association \(NDA\)](#)
- [Society of American Indian Dentists \(SAID\)](#)

National STEM Professional Associations/Conferences (non-exhaustive list)

- [American Association for the Advancement of Science \(AAAS\)](#)
- [American Indian Science and Engineering Society \(AISES\)](#)
- [Annual Biomedical Research Conference for Minoritized Scientists \(ABRCMS\)](#)
- [Association for Women in Science \(AWIS\)](#)
- [Latinos in Science and Engineering MAES\)](#)
- [National Science Foundation \(NSF\)](#)
- [Out in STEM \(oSTEM\)](#)
- [Society for Advancement of Chicanos/Hispanics & Native Americans in Science](#)
- [Society of Asian Scientists and Engineers \(SASE\)](#)

Additional UW resources:

The Center for Communication, Difference and Equity (CCDE) provides a space for our UW community of students, faculty and staff gather to promote greater equity.

<http://ccde.com.washington.edu/>

Foundation for International Understanding Through Students (FIUTS) advances international understanding through cross-cultural experiences, student leadership and community connections.

<https://www.fiuts.org/>

The Indigenous Wellness Research Institute's (IWRI) mission is to marshal community, tribal, academic and governmental resources towards innovative, culture-centered collaborative social and behavioral research and education.

<https://iwri.org/>

Intellectual House is a longhouse-style facility providing multi-service learning and gathering space for American Indian and Alaska Native students, faculty and staff.

<https://www.washington.edu/diversity/tribal-relations/intellectual-house/>

The Latino Center for Health provides leadership for community-engaged research through capacity building and partnerships with community stakeholders to promote impactful improvements in the health of Latinx communities in WA State.

<https://latinocenterforhealth.org/>

Leadership Without Borders works with and for undocumented students on UW campus.

<http://depts.washington.edu/ecc/lwb/>

The Native Organization of Indigenous Scholars (NOIS) was created to bring together University of Washington graduate and professional students of Indigenous descent.

<http://students.washington.edu/noisrso/index.php>

The Office of Minority Affairs and Diversity offers a range of services, including academic support programs, financial aid counseling and opportunities, and social and cultural activities. Visit their Services for UW Students page for more information.

<https://www.washington.edu/omad/>

The Q Center facilitates and enhances a brave, and affirming environment for students, faculty, staff, and alumni of all sexual and gender orientations, identities, and expressions.

<https://sites.uw.edu/qcenter/>

SACNAS is an inclusive organization dedicated to fostering the success of Chicanos/Hispanics and Native Americans, from college students to professionals, in attaining advanced degrees, careers, and positions of leadership in STEM.

<https://www.sacnas.org/>

The Samuel E. Kelly Ethnic Cultural Center is part of The Office of Minority Affairs & Diversity. The Kelly ECC has a wealth of resources and opportunities available to students including student advising, organizational development, personal growth, and referrals to different departments and programs.

<http://depts.washington.edu/ecc/>

The Washington Institute for the Study of Inequality and Race (WISIR) is an interdisciplinary research center at the University of Washington dedicated to bringing the tools of critical theory and contemporary social science to the analysis of social, economic, and political inequality along lines of race, ethnicity, gender, sexuality, and class.

<https://depts.washington.edu/wisir/>

The Women of Color Collective (WOCC) is housed within UW's Department of Gender, Women and Sexuality Studies <https://gwss.washington.edu/research/films-and-videos/uw-women-color-collective-film>

The Women's Center works as a catalyst for change through disrupting cycles of oppression, breaking down gender-based barriers, leadership development and educational programs.

<https://www.washington.edu/womenscenter/>

Emergency Funding and Food Resources

UW Emergency Aid is for unexpected cost and needs for currently enrolled students. <https://www.washington.edu/emergencyaid/>

UW Food Pantry provides food to students, staff and faculty who are experiencing food insecurity.

Poplar Hall 210, 1311 NE 41st | <https://www.washington.edu/anyhungryhusky/the-uw-food-pantry/>

University District Food Bank partners with UW Food Pantry and serves residents in zip codes 98102, 98103, 98105, 98112, 98115 and 98125.

5017 Roosevelt Way NE | <https://www.udistrictfoodbank.org/>

Health Insurance

Students are encouraged to acquire comprehensive health and accident insurance that will provide continuous coverage during his or her participation in the education program. Students are responsible for their own health needs, health care costs, and health insurance coverage. **UW does not offer health insurance to domestic students.** Domestic students are defined as US citizens, green card holders, DACA recipients and undocumented students. Domestic students are not required to have health insurance by the university.

WA State health care plans for domestic students:
<https://www.wahealthplanfinder.org/us/en/home-page.html>

Housing

- Graduate Student Housing: <https://hfs.uw.edu/Live>
- GSEE's Find a Roommate Facebook page_for BIPOC graduate students: <https://www.facebook.com/groups/433915590526762/>
- Zillow Rentals: https://www.zillow.com/homes/for_rent/

Husky Card/Student ID

Students of the UW are required to obtain a Husky Card, the student ID card. The card grants access to services on campus as well as student discounts around the city. To obtain a card, students bring their student ID number and state- or federally issued photo ID to an ID Center during business hours. Cards can also be obtained from the ID Center at the Seattle, Bothell or Tacoma campus. The Seattle campus ID Center is located on the ground floor of the Odegaard Undergraduate Library. A staff person will take a picture and print the card. For most updated information and hours, visit Husky Card Services: <https://hfs.uw.edu/Husky-Card-Services>

Immunizations

All matriculated UW Seattle campus students are required to provide proof of measles immunity. Students are not able to register for classes without satisfying the requirement. Hall Health Center administers the UW Measles Requirement program for the UW Registrar's office. Visit Hall Health's website for instructions on how to submit your measles verification.

registrar.washington.edu/course-registration/registration-policies/immunization

Practicum sites may follow their own immunization standards and practices. Students in the program must abide by the immunization standards of their practicum site.

Health Sciences Immunization Program (HSIP)

The Health Sciences Immunization Program (HSIP) ensures students enrolled in health sciences academic programs comply with the requirements detailed in the University's affiliation agreements with clinical and practicum training sites. Students enrolling in these UW health sciences programs that require clinical or practicum training to complete the degree should expect to receive notification from academic program staff of the HSIP requirements. Full details here:

<https://www.ehs.washington.edu/workplace/health-sciences-immunization-program-hsip>

Libraries and Writing Resources

The Husky Card functions as the student library card. The UW has an extensive online research collection as well as media and entertainment resources.

www.lib.washington.edu

Health Sciences Library

T-334 Health Sciences Building
1959 NE Pacific St, Seattle

<https://hsl.uw.edu/>

Health Sciences Librarian Liaison

Ms. Electra Enslow, Director, Clinical Research & Data Services
electrae@uw.edu

Odegaard Writing and Research Center

<https://depts.washington.edu/owrc/>

UW Poster & Photo

<https://www.washington.edu/research/shared-research-facilities-resources/uw-poster-and-photo/>

T-271 and T-273 Health Sciences Building

uwposter@uw.edu

Managing your Information and Access

MyUW

MyUW is the main portal for a variety of student-specific information as well as campus resources, like library computer access. Students must have established their UW NetID to access MyUW. You will also receive emails in your UW account ([NetID]@uw.edu).

myuw.washington.edu

Directory Information

Individual email addresses, telephone numbers and other information can be located through the UW Directory website (www.washington.edu/home/peopledir/), provided the student authorizes release of directory information to the public. Please note that at this time, the Faculty and Staff search feature in the directory is open to the public, but the “search students” feature requires UW NetID login to view. Visit www.washington.edu/students/studentdirinfo.html for more information about the student directory. Students are responsible for setting their own directory information to either restrict or allow release.

Office of Student Financial Aid

Student Financial Aid can help students field funding issues and better understand their financial aid options.

www.washington.edu/financialaid | osfa@uw.edu | 206-543-6101

School of Dentistry Intranet

<https://uwnetid.sharepoint.com/sites/sod/students/SitePages/Home.aspx>

Student Health and Well-Being

UW Seattle offers a wide range of health and wellness services, and including medical and dental care, counseling services, safety resources, peer health advocacy and more. Please see their comprehensive website for more, including Hall Health and Counseling Center information!

<https://wellbeing.uw.edu/> | 206-543-6085 (For emergencies, call 911)

- To get started with Mental Health services: <http://wellbeing.uw.edu/topic/mental-health>

- To get started with Medical & Dental: <https://wellbeing.uw.edu/topic/medical-get-started/>
- To get started with Recreation: <https://wellbeing.uw.edu/topic/recreation/>

Counseling Center's Health Sciences Liaison and Counselor

Jen Nguyen is the current Liaison to Health Sciences and Licensed Mental Health Counselor, providing counseling to SOD students. Schedule with the Counseling Center via their student portal: <https://www.washington.edu/counseling/>

Transportation Services

Students enrolled in the master's program have access to the student public transit pass, or U- PASS, through their Husky Card. For information about U-PASS as well as information on getting to and from campus, please visit Transportation Services.

facilities.uw.edu/transportation

The Seattle area is served by the [King County Metro System](#), which includes light rail, bus, water taxi and other transit options. [Trip Planner](#) helps you plan your trip.

**The [OneBusAway](#) app for is best for tracking transit arrival for King County Metro!*

The **UW Shuttles** system includes free transportation options for students, faculty, staff, and medical center patients and their families between key UW sites, such as the UW Medical Center, Harborview Medical Center, UW Roosevelt Clinic, UW Tower, Fred Hutchinson Cancer Research Center, Seattle Cancer Care Alliance, and the UW South Lake Union facility. facilities.uw.edu/services/tags/Shuttles

University Bookstore

The University Bookstore is located just blocks from UW Seattle Campus on University Ave, offering textbooks, supplies, gifts, and a café.

<https://www.ubookstore.com/>

Additional Campus and Community Resources

Career Center and Professional Development

The Career & Internship Center offers a range of services such as coaching, resume reviews and events, including targeted graduate student career resources.

<https://careers.uw.edu/graduate-students/>

Commencement, Graduation and Beyond Graduation

Eligible graduates may participate in the UW's commencement ceremony at the end of spring quarter: www.washington.edu/graduation/eligibility

As a graduate, we welcome you to join the [School of Dentistry Alumni Association](#) to stay connected!

- If applicable, update your local/permanent address at [MyUW](#) and [Employee Self Service](#).
- Graduates will be taken off the student listserv after degrees are posted.

Note: your UW NetID, password and forwarding will continue to be active, and you may continue to forward your email to your UW Google Apps account or other email service. Google Apps accounts do not expire for students. You may adjust your [UW Email Forwarding](#) as needed.

Degree Posting

- You will receive an email when your graduation has been recommended by your department and when your degree has been granted by the Graduate School.
- Your degree will post to your UW transcript two business days after the Graduate School processes your graduation.

Transcripts

For any future official transcripts orders, please see the [UW Registrar's transcript webpage](#). A new transcript service will allow current and former students and alumni to

seamlessly order and pay for transcripts with UW's partner, Parchment/Credentials Solutions.

Mailed Diploma

Diplomas take about 3 months for processing, and graduates will receive them in the mail at that time: <https://registrar.washington.edu/students/graduation-commencement-and-diplomas/>

Crisis Resources

SafeCampus: <https://www.washington.edu/safecampus/>

Call 24 hours/7 days a week: 206-685-7233

Crisis Clinic

The Crisis Clinic provides immediate help to individuals, families and friends of people in emotional crisis. The clinic can help you determine if you or your loved one need professional consultation and can link you to the appropriate services. They can provide immediate language interpretation in more than 155 languages. Calls are anonymous and confidential. 24-Hour Crisis Line: 206-461-3222 or 866-4CRISIS (866-427-4747)

King County 2-1-1 Community Resources Online (CRO)

Dial 2-11 or 206-461-3200 or 800-621-4636. The most up-to-date and comprehensive database of health and human services available for all of Washington State.

Division of Student Life

The Division of Student Life includes resources for health and safety, campus life, diversity and disability services, financial services and more.

www.washington.edu/studentlife/

Mentoring Resources

Mentoring Resources for Graduate Students and Faculty

<https://grad.uw.edu/current-students/student-success/mentoring/>

Center for Teaching & Learning, Services for Departments and Programs

www.washington.edu/teaching/about-the-ctl/ctl-services/services-for-departments-and-

[programs/](#)

Recreation and Intramurals

<https://wellbeing.uw.edu/topic/recreation/>

Intramural Activities Building (IMA) Gym

www.washington.edu/ima

Student Parent Resource Center

The Student Parent Resource Center provides resources and financial support to students with children, including the Childcare Assistance Program which may cover costs of licensed childcare for children (ages birth to 12 years old) while enrolled in an eligible program of study.

osfa.washington.edu/wp/sprc/

Student Legal Services

Student Legal Services (SLS) is a law office on the UW-Seattle campus that provides confidential legal advice and representation to current students, including a free 40-minute legal consultation.

depts.washington.edu/slsuw/

Civil Rights Investigation Office <https://www.washington.edu/cr-investigations/>

A. Title IX Investigation Office (TIXIO)

Title IX, Washington State law, and University of Washington policy prohibit discrimination based on sex, sexual orientation, gender, gender expression, pregnant or parenting status, and LGBTQ (lesbian, gay, bisexual, transgender, queer) identity. You can file a report and seek support and resources through the UW's Title IX Office.

B. University Complaint Investigation and Resolution Office (UCIRO)

The University Complaint Investigation and Resolution Office (UCIRO) investigates complaints that a University employee has violated the University's non-discrimination and/or non-retaliation policies.

Appendix

- A. OHS General Exam Policy and Format
- B. OHS Dissertation Defense Policy and Format
- C. OHS Academic Progress Policy
- C. OHS Grievances Policy

Appendix A

DEPARTMENT OF ORAL HEALTH SCIENCES (OHS): GENERAL EXAMINATION POLICY AND FORMAT

A. Purpose of Ph.D. General Examination

- The purpose of the general exam is "an inclusive evaluation of the candidate's mastery of the major and related fields of study, including the tools of research in which competence has been certified." As administered Oral Health Sciences Graduate Program, for the Ph.D. degree, the general consists of two components: a written research proposal in research grant application format, and an oral defense of this proposal.
- Additionally, the purpose is to determine if the student is capable of recognizing questions appropriate for research projects, developing these questions into a written research proposal, and orally defending the proposal.
- The final purpose is providing the student an opportunity to receive feedback from the Supervisory Committee on the proposed research project.

B. Preparation

Prior to scheduling the General Exam, a student must:

- Identify a Supervisory Committee
- Meet with the entire Supervisory Committee at least once to discuss the exam plans and confirm that the committee finds the student adequately prepared to successfully pass the exam.
- Carefully review the Graduate School's [Degree Requirements](#) for the most comprehensive information on defending and graduating
- **Finalize a defense date, time and location** that works for you and your supervisory committee. It is highly recommended to schedule your exam no later than the last day of instruction in case any unexpected issues arise such as you or a committee member getting sick and needing to reschedule.
- **Please note that the General Exam format is closed, not open to the public.**
- **Email your GPA to reserve a room, including what equipment you will require.** At least a 25-person capacity room is recommended. Health Sciences [Room Matrix](#)
- **Schedule your exam in [MyGrad](#) and notify your GPA once doing so. Departmental approval will then be granted.**

C. Format

- The student will take the General Examination in the second or early in the third year of graduate work.
- This examination will be administered by the Supervisory Committee.

UNIVERSITY of WASHINGTON ■ a written Ph.D. thesis project proposal in the form of an NIH grant.

- an oral presentation and defense of the proposal in front of the Supervisory committee
- The Ph.D. thesis research proposal will be chosen with the approval of the student's thesis advisor and members of the Supervisory Committee.
- The written proposal will broadly follow the general format of National Research Service Award (NRSA) Fellowship Applications (F31, F32, F30). The instructions are here: <https://grants.nih.gov/grants/how-to-apply-application-guide/forms-f/fellowship-forms-f.pdf>. The only required portions are
 - **Specific Aims (described on page F-64),**
 - **Research Strategy (F-65 to F-66).**
 - **Bibliography and References Cited (page F-40).**
- The Specific Aims section will be no longer than one page. The Research Strategy section will be limited to 6 pages. Note that no budget or administrative pages will be required. Students will not be penalized for a lack of preliminary results supporting the proposal, and students should not delay scheduling the exam in order to obtain preliminary results. Detailed formatting instructions are included below ("Department of Oral Health Sciences General Exam Format").
- The student should plan to spend four to six weeks preparing the written application. The student will distribute copies of the proposal to all the members of the Supervisory Committee and to the Graduate Program Coordinator **at least 7 days** prior to the presentation.
- The oral examination will generally be 2 hours in duration and will comply with Graduate School regulations.

D. Evaluations and Outcomes

- The student's performance on the oral exam will be evaluated by the thesis Supervisory Committee. If the student's performance should be less than satisfactory, then the Supervisory Committee will make appropriate recommendations to the OHS graduate faculty.

There are three possible outcomes to the General Exam:

- **Satisfactory (Pass)**

- In the event of a report of satisfactory (pass), the supervisory committee will report to the Graduate Program Director and the student that the student has been advanced to candidacy for the Ph.D. degree.

- **Reservations (Conditional Pass)**

- In the event of a report of reservations, the supervisory committee will report these reservations in writing to the Graduate Program Director and Department Head for transmission to the Graduate College and the student. The student must satisfactorily address the reservations in a timely manner, as specified in the written report from the committee. On the recommendation of the supervisory committee, remediation to address the reservations may include:

- assignment of additional course work
- assignment and discussion of specific readings

UNIVERSITY of WASHINGTON ● further examination in a particular area

- rewriting of portions of the proposal
- specified academic or research work as appropriate.
 - When the reservations have been addressed to the satisfaction of the supervisory committee, the committee will inform the Graduate Program Director, the Graduate School and the student.
- **Unsatisfactory (Fail)**
 - In the event of a report of unsatisfactory, the student may request a re-examination that must be scheduled within the quarter following that in which the first examination took place. The re-examination cannot take place sooner than two months, nor longer than 12 months, after the first examination. Permission for re-examination must receive the approval of the supervisory committee. A second failure of this examination will result in dismissal of the student from the Ph.D. graduate program. In the event that the request for re-examination is denied, the student will immediately be dismissed from the OHS Ph.D. Graduate Program.

Department of Oral Health Sciences General Exam Format

The General Exam requires preparation of a Research Plan or proposal in the format of an NIH grant. This plan should include sufficient information needed for evaluation of the proposed PhD project independent of other documents. It should be specific and informative, and include relevant background material, preliminary findings, and methods. You will need to discuss your specific aims with your mentor; however, writing the proposal is your responsibility. Give copies of the General Exam to your PhD advisory committee at least seven days prior to your scheduled exam.

The proposal (Research Plan)

Overall Format

The General Exam written document should have the format of an NIH Fellowship application, which is outlined below.

a. **Title Page. (One page)**

b. **Specific Aims. (One page Arial 11 font minimum, minimum 0.5 margins)** List the broad, long-term objectives and what the specific research proposed in this application is intended to accomplish. State the hypotheses to be tested.

c. **Research Strategy**

For the remaining sections, please keep the *entirety* to six pages single space, Arial 11 font minimum, minimum 0.5 margins, not including Literature Cited, which can be any length.

Background and Significance. Briefly sketch the background leading to the present application, critically evaluate existing knowledge, and specifically identify the gaps which the project is intended to fill. State concisely the importance and health relevance of

the research described in this application by relating the specific aims to the broad, long-term objectives.

Preliminary Studies. Use this section to provide an account of preliminary studies pertinent to the application. These preliminary studies may have been carried out by the student, but need not to have been.

Research Design and Methods. Clearly state a falsifiable hypothesis, supported by the preliminary studies, and the experiments that will test it. Describe the research design and the procedures to be used to accomplish each of the specific aims of the project. Include how the data will be collected, analyzed, and interpreted. Describe any new methodology and its advantage over existing methodologies. Clearly state expected results that will support the hypothesis, and alternative results that will not support the hypothesis, and how you will interpret them. Include a separate paragraph on Potential Pitfalls, which are ways that your experiment might not work – note, that this is different from the experiment working, but the results not supporting the hypothesis.

Literature Cited. List all references. Each reference must include the title, names of all authors, book or journal, volume number, page numbers, and year of publication. The reference should be limited to relevant and current literature. While there is not a page limit for references, it is important to be concise and to select only those literature references pertinent to the proposed research.

Graduate School General Exam URL: <https://grad.uw.edu/policies/1-1-graduate-degree-requirements/>

Appendix B

DEPARTMENT OF ORAL HEALTH SCIENCES (OHS): Dissertation Defense Policy and Format

A. Purpose

Oral defense of the dissertation and the field with which it is concerned.

B. Preparation

Prior to Defense

1. Carefully review the Graduate School's [Degree Requirements](#) for the most comprehensive information on defending and graduating, which includes:
 - Preparing to Graduate
 - Thesis/Dissertation Information
 - Concurrent Graduate Degree Requirements
 - Dates and Deadlines
 - Policies and Procedures

The above [Degree Requirements](#) page serves as the most exhaustive explanation of instructions, while this document serves as a supplemental document to focus on essential steps with the department.

2. **Register** for the final quarter you are to defend. Registration as a graduate student is required the quarter the exam is taken and the degree is conferred.
3. **Meet with your committee** prior to the quarter you will defend about potential dates for your defense, who will serve on the [Reading Committee and Reading Committee responsibilities](#).
4. **Email your Graduate Program Advisor (GPA) the Reading Committee members** list to input and approve in MyGrad, ideally by the start of the quarter you will defend.
5. **Finalize a defense date and time** that works for you and your supervisory committee. It is highly recommended to schedule your exam no later than the last day of instruction in case any unexpected issues arise such as you or a committee member getting sick and needing to reschedule.
6. **Email your GPA to reserve a room, including what equipment you will require.** At least a 25-person capacity room is recommended. Health Sciences [Room Matrix](#)
7. **Schedule your exam** in [MyGrad and n](#)otify your GPA once doing so. Departmental approval will then be granted.
8. **Submit your preferred name, defense title and location/day/time** to the GPA at least three weeks before the exam to be included in School of Dentistry and OHS announcements.
9. **Send your reading committee a draft of your written thesis about two weeks before the exam.**
10. Your GPA will email you the Exam Committee Signature Form prior to the exam date to either hand to your committee chair on the day of the defense (in person) or to email to your chair (remote). The Committee Signature Form must be signed by the committee after the exam, and a committee member must return it to the GPA or Graduate Program Coordinator (GPC), ideally in person, or via email.

Day of Defense

- 11. Print and bring the Exam Committee Signature Form** to your defense, if defending in person, for committee signatures. [What to do if a committee member is late or missing Virtual Doctoral Examinations](#)

Contact Health Services at 206-543-6729 for classroom technology emergencies.

- 12. Submit Signed Committee Signature Form**

After the defense (or within the next day or so), either the Chair or committee member submits the signed Committee Signature Form to the GPA or GPC via email or in person. Those defending virtually may have the Committee Signature Form signed electronically/printed, signed and sent via email with committee members' signatures. *The Committee Signature Form will be used to submit your exam results to the Graduate School no later than **the last day of the quarter** and will be kept on file by the department.*

Last Day of Quarter

- 13. Submit your dissertation and Survey of Earned Doctorates** certificate to the UW ETD Administrator Site and complete any other steps outlined on the [Thesis/Dissertation webpage](#). Also, your committee members register electronic approval of your thesis.

C. Format

The department is following the formatting guidelines outlined by the Graduate School on [Thesis/Dissertation submission via Electronic Thesis/Dissertation \(ETD\)](#).

D. Evaluations and Outcomes

Satisfactory

If the Final Examination is satisfactory, the supervisory committee members who participate at the examination sign the Committee Signature Form and return it to the student's graduate program by the last day of the quarter (last day of finals week). Any members of a supervisory committee who participate at an examination but do not agree with the majority opinion are encouraged to submit a minority report to the Dean of the Graduate School.

Unsatisfactory

If an examination is unsatisfactory, a supervisory committee may recommend that the Dean of the Graduate School permit a second examination after a period of additional study.

Department of Oral Health Sciences Doctoral Dissertation Format

The department is following the formatting guidelines outlined by the Graduate School: <https://grad.uw.edu/current-students/enrollment-through-graduation/thesis-dissertation/>

ETD Formatting Guidelines: <https://grad.uw.edu/current-students/enrollment-through-graduation/thesis-dissertation/>

After you submit your ETD, the Graduate School will review your document as part of the graduation process at the end of each quarter. We will review for information accuracy, consistency, and to ensure your ETD meets the formatting requirements described below. There are three required sections (pages) that must be included at the beginning of your manuscript: 1) Title Page, 2) Copyright Page, 3) Abstract. Templates for these sections are provided below.

Apart from these first three pages, the Graduate School does not adhere to any specific formatting or publishing requirements unless explicitly stated by the ProQuest Author Guide: Preparing Your Manuscript for Submission (provided below). You should refer to the citation, formatting, and style specifications of your discipline and the guidance of your supervisory committee. *Note: theses and dissertations must be submitted in PDF format.*

Required Sections:

- **Title Page**
[Doctoral Dissertation Title Page Template](#)
 - Must include all items listed in the sample title page and placed in the same order
 - May be the first or second page of your document
 - These items must match MyGrad – student view information:
 - Title of document
 - Author’s Full Name
 - Name of degree as it will appear on your diploma
 - Year of graduation
 - Names of chair/committee members (do not include signatures or professional titles, e.g. Dr. or PhD, before/after faculty names)
 - Program authorized to offer degree (school or department)
- **Copyright Page**
[Copyright Page Template](#)
 - May be the first or second page of your document
 - Name and year must match title pages
 - List the year of graduation
- **Abstract**
[Abstract Template](#)
 - Place abstract after copyright and title page

ETD Formatting Resources:

- [Thesis/Dissertation Formatting Checklist](#) – a quick reference guide of the formatting do’s and don’ts provided below.
- [ProQuest Dissertation Publishing — Author Guide: Preparing Your Manuscript for Submission](#)
- [ProQuest Online Submission FAQs](#)
- [Doctoral Dissertation Title Page – Fillable PDF Template](#)

- [Word Templates](#) – Alex Mamishev, Professor in Electrical Engineering maintains a Word file that other students may find useful when formatting their document.

Appendix C:

Department of Oral Health Sciences Academic Progress Policy

This document is distributed to all graduate students and faculty in the Oral Health Sciences graduate program to clarify what should constitute satisfactory progress toward completion of a degree. **Related statements of Graduate School policies are available to students and faculty at the [Graduate School Policies & Procedures website](#).**

This document provides some general expectations and guidelines for making satisfactory progress, though it may not capture all the potential circumstances that could lead to unsatisfactory progress.

For students who have been **on leave or are pursuing the degree on a part-time basis**, satisfactory progress will be determined on an individual basis in consultation with the student's Faculty Mentor/Supervisory Committee Chair and the Graduate Program Director.

A student's satisfactory progress status will be taken into consideration when granting permission for on-leave status.

A. General Expectations

MS Thesis Degree

A minimum of 10 credits/quarter (full time status) for at least 7 quarters (2 credits/quarter during summer quarter); 70 credits are required for the MS Thesis degree including at least 9 credits of thesis.

- All course requirements as stipulated by the program with a minimum cumulative GPA and minimum quarterly GPA of 3.0.
- All core courses must be passed with individual grades of at least 2.7 or they must be retaken.
- No more than one "incomplete" grade outstanding for one quarter.
- Thesis proposal approved 4 months prior to date of intended graduation.
- Successful defense of thesis by the end of the 8th quarter of the program.

MS DH Degree

A minimum of 10 credits/quarter (full time status) for at least 7 quarters (2 credits/quarter during summer quarter); 70 credits are required for the MS DH degree.

- All course requirements as stipulated by the program with a minimum cumulative GPA and minimum quarterly GPA of 3.0.
- All core courses must be passed with individual grades of at least 2.7 or they must be retaken.
- No more than one "incomplete" grade outstanding for one quarter.
- Successful completion of capstone project. A minimum of six capstone project credits required.

PhD Degree

A minimum of 10 credits/quarter (full-time status) for at least 7 quarters with a minimum course requirement of 90 credits (2 credits/quarter during summer quarter); 60 credits must be completed prior to the General Exam, and 27 are 800 level Dissertation credits.

- All course requirements as stipulated by the program with a minimum cumulative GPA and minimum quarterly GPA of 3.0.
- All core courses must be passed with individual grades of at least 2.7 or they must be retaken.
- No more than one "incomplete" grade outstanding for one quarter.
- General Examination should be taken in the second year but must be taken and passed by the end of Autumn quarter of the student's 3rd year in the program. In the event of a report of an

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unsatisfactory outcome, the student may request a re-examination that must be scheduled within the quarter following that in which the first examination took place. The reexamination cannot take place sooner than two months, nor longer than 12 months, after the first examination. Permission for re-examination must receive the approval of the supervisory committee. A second failure of this examination will result in dismissal of the student from the PhD graduate program. In the event that the request for re-examination is denied, the student will immediately be dismissed from the OHS PhD Graduate Program.

- Successful defense of dissertation.
- There is an expectation of at least one first-author publication either published or in press, for receipt of a PhD. Exceptions are to be negotiated with the advisor and GPD.

DDS/PhD Dual Degree

A minimum of 10 credits/quarter (full-time status) for at least 7 quarters with a minimum course requirement of 90 credits (2 credits/quarter during summer quarter); 60 credits must be completed prior to the General Exam, and 27 are 800 level Dissertation credits.

- All course requirements as stipulated by the program with a minimum cumulative GPA and minimum quarterly GPA of 3.0
- All core courses must be passed with individual grades of at least 2.7 or they must be retaken.
- No more than one “incomplete” grade outstanding for one quarter.
- General Examination should be taken in the second year of PhD training but must be taken and passed by the end of Autumn quarter of the student’s third year of PhD training.
- Successful defense of dissertation.
- There is an expectation of at least one first-author publication either published or in press, for receipt of a PhD. Exceptions are to be negotiated with the advisor and GPD.
- PhD course requirements can be taken either in the DDS or PhD portion of training

B. Persons Responsible for Evaluation of Student Progress

MS

- Initially, the student’s Faculty Advisor, along with the Graduate Program Advisor and Graduate Program Director, is responsible for monitoring the student's coursework and research progress through the program.
- After a Master’s Supervisory Committee is established, the committee chair is both the student’s faculty and thesis advisor, and the committee has responsibility for assessment of the thesis.

PhD

- Initially the student’s Faculty Advisor, along with the Graduate Program Advisor and Graduate Program Director, is responsible for monitoring the student's progress through the program.
 - After a Doctoral Supervisory Committee is established, the committee chair is both the student’s academic and dissertation advisor, and the committee has responsibility for assessment of the general examination and the dissertation.
- C. Performance and Progress Measures**
- Quality of academic efforts (e.g., research assistantship, teaching assistantship, research study, abstracts, presentations, papers); as judged by faculty and/or outside reviewers.
 - Written research agreements and written evaluations of research and academic progress.
 - Course grades.

D. Conditions Warranting Recommendation to Alter Student's Status

The OHS Graduate Program is guided by [Graduate School Academic Performance and Progress](#) in considering the actions listed below. Advisors/supervisors are notified of these actions as well as students.

Academic Notification

The Graduate Program Director will issue an academic notification letter to students for:

- Cumulative GPA below 3.0
- Untimely progress through the program
- Unsatisfactory quality of academic efforts

If an academic notification is issued, a written remediation plan with milestones needs to be developed by the student and approved by the student's faculty advisor and Graduate Program Director.

Academic Alert

The Graduate Program Director will place a student on academic alert for:

- Cumulative GPA less than 3.0 for two consecutive quarters
- Unsatisfactory quality of academic efforts for two consecutive quarters
- Failure to meet milestones or deliverables outlined in the remediation plan in response to an issued academic alert
- Untimely progress for at least one consecutive year

If an academic alert is issued, a written remediation plan with milestones needs to be developed by the student and approved by the student's faculty advisor and Graduate Program Director.

Final Academic Alert

The Graduate Program Director will place a student on final academic alert for:

- Cumulative GPA less than 3.0 for three consecutive quarters
- Unsatisfactory quality of academic efforts for three consecutive quarters
- Failure to meet milestones or deliverables outlined in the remediation plan in response to an issued academic alert
- Untimely progress for at least two consecutive years

Appendix D

Department of Oral Health Sciences Academic Grievance Policy

The Department of Oral Health Sciences is committed to supporting graduate students and working to resolve any problems and/or conflicts that may arise. Students are encouraged to address situations proactively. It is recommended that students attempt to resolve any problems or conflicts informally. At this level, the subject remains confidential.

Within the department, the student can first reach out to the **Graduate Program Director or Graduate Program Advisor**.

If not satisfied with the result, or if more appropriate, please contact the **Department Chair**.

If necessary, a formal complaint may be made in writing. Once a statement is put in writing it becomes part of the record and at that point is available to anyone with an interest in the subject, including those involved in the situation. This can be done either within or outside the department.

If the student fails to resolve the difficulties within the department, there are avenues available outside the department:

- [School of Dentistry Office of the Dean](#)
- [UW Ombudsman](#)
- [Graduate School's the Associate Dean for Student and Postdoctoral Affairs and/or Associate Dean for Equity & Justice in Graduate Programs](#)
- [University Complaint Investigation and Resolution Office \(UCIRO\)](#)

UCIRO is responsible for investigating complaints that a university employee has violated the University's non-discrimination and/or non-retaliation policies. A UCIRO investigation may be requested either by an individual or by the administrative head of a university organization.

Please also see the Graduate School's Academic Grievance Policy: <https://grad.uw.edu/policies/3-8-academic-grievance-procedure/>

Appendix E

Department of Oral Health Sciences Graduate Faculty Membership Policy

This document is distributed to all faculty in Oral Health Sciences to clarify what qualifies as OHS graduate faculty. **Related statements of Graduate School policies are available to students and faculty at the [Graduate School Policies & Procedures website](#).**

A: Membership in the Graduate Faculty and Doctoral Endorsement

The Graduate Faculty consists of those members of the department faculty who have been designated as actively participating in graduate education. Powers and Duties of the Graduate Faculty are given in [Chapter 23; section 23-42 and 23-44](#) of the Faculty Code.

1. Graduate Faculty Appointment

Graduate Faculty are granted either continuous appointments or 5-year renewable appointments, as described below under “Eligibility for Graduate Faculty Status.” New Graduate Faculty members are nominated to general membership by a quorum majority vote of Graduate Faculty from the academic unit where the faculty hold the primary faculty appointment. The nominated faculty are subsequently appointed by the Dean of the Graduate School ([Faculty Code Section 23-42](#)). In cases where the faculty member’s primary academic unit does not offer a graduate degree or graduate certificate, the faculty member may be nominated to the Graduate Faculty by the OHS department as a graduate degree-offering unit where that faculty member holds an adjunct appointment.

The OHS Department is responsible for assessing whether a faculty member meets the following required qualifications for a Graduate Faculty appointment based on the faculty member’s academic background and the nature of scholarship and research in the department.

- Active involvement in (or, for an initial appointment, qualification for) graduate student teaching, mentoring, and/or research supervision.
- Research-based scholarship as demonstrated by peer-reviewed publications, equivalent creative work, or equivalent teaching-based scholarship, as defined by the academic unit.

2. Doctoral Endorsement

Graduate Faculty members who substantively engage in doctoral education must also have a specific “doctoral endorsement.” A doctoral endorsement is required to **chair a doctoral supervisory committee** or to serve as a Graduate School Representative (GSR) to doctoral supervisory committees.

The OHS Department is responsible for assessing whether a faculty member meets the following required qualifications for doctoral endorsement based on the faculty member’s academic background and the nature of scholarship and research in the department.

- Recent evidence of the ability to (or, for an initial appointment, qualification to) chair a doctoral supervisory committee, including supervising doctoral research and overseeing the doctoral dissertation or final project/capstone.

- The ability to serve as the Graduate School Representative (GSR) for doctoral supervisory committees.

B Eligibility for Graduate Faculty status

Graduate Faculty status can either be continuous or for a 5-year renewable term. The requirement for each category of Graduate Faculty status follows. The [accompanying document](#) contains a complete list of faculty appointments by eligibility.

1 Continuous status

- **Faculty must hold a title of assistant professor, associate professor, or professor.**
- Continuous Graduate Faculty status does not require tenure, nor do faculty need to be tenure-track.

2 5-year renewable term

- Faculty with the title of assistant professor, associate professor, or professor who are appointed with **emeritus, retired, affiliate, research, or clinical status** may be nominated for a 5-year, renewable term and may be endorsed to chair doctoral supervisory committees if deemed appropriate by the OHS department.
- Faculty with the following titles and ranks (including those with emeritus, retired, affiliate, research, or clinical status) may be nominated for a 5-year, renewable term and may be endorsed to chair doctoral supervisory committees if deemed appropriate by the OHS department and hired through a nationally competitive search for a faculty position:
 - Professor of Practice
 - Artist in Residence
 - Senior Artist in Residence
 - Lecturer
 - Assistant Teaching Professor
 - Associate Teaching Professor
 - Teaching Professor
- Instructors and those in temporary, acting, or visiting appointments are not eligible for Graduate Faculty status.
- Graduate Faculty status is automatically continued for the first five years of an otherwise eligible emeritus or retired faculty appointment. After that, retired and emeritus faculty are treated as all other renewable 5-year appointments.

C Procedures for Graduate Faculty Membership

Faculty are nominated by vote to either general membership or to membership with doctoral endorsement. An individual first appointed as a general member can subsequently receive doctoral endorsement.

1. Voting Requirements

- All members of the Graduate Faculty **with a primary appointment** in OHS (non-affiliate and non-adjunct and OHS-identified in MyGrad) vote on proposed nominations.
- Faculty with joint appointments may vote in multiple units.

- Renewal of a Graduate Faculty 5-year term requires a vote of the OHS Graduate Faculty.

2. Nomination Requirements

Eligible faculty members from all three campuses of the university may be nominated for graduate faculty membership, including membership with doctoral endorsement. Nominations for Graduate Faculty status across all three University of Washington campuses should be made by a faculty member's primary graduate degree-offering or graduate certificate-offering academic unit.

- If a faculty member holds a joint appointment either academic unit can make the nomination.
- If a faculty member holds an adjunct appointment, only the primary academic unit can nominate, unless the primary academic unit does not offer a graduate program.
- If the faculty member's primary appointment is in a unit that does not offer a graduate program, the Graduate School will accept a nomination to appoint the faculty member to the Graduate Faculty from (1) a unit where the faculty member holds an adjunct appointment or (2) the faculty of a Graduate School Interdisciplinary Group where the nominated faculty is active in the interdisciplinary field.

3. Process Requirements

- Authorized administrative personnel in each academic unit will have access to process new Graduate Faculty nominations and renewals through the online MyGradProgram.
- E-mail notification to the newly nominated or renewed faculty member and the chair/director of the faculty's academic unit is automatically sent from MyGradProgram.

D. Expectations of Graduate Faculty Members

The OHS Department is responsible for assuring members of the Graduate Faculty show ongoing evidence of the following, based on the faculty member's academic background and the nature of scholarship and research in OHS:

- Active involvement in graduate student teaching, mentoring, and/or research supervision.
- Continued research-based scholarship as demonstrated by peer-reviewed publications, equivalent creative work, or equivalent teaching-based scholarship, as defined by OHS.

Also see Faculty Code [Chapter 23, Sections 23-42, 23-44](#). Executive Orders [IV](#) and [VII](#).

E. Terminating Graduate Faculty Status

A vote of the Graduate Faculty of a faculty member's appointing academic unit is required to terminate Graduate Faculty status. The unit informs the Graduate School of the decision and the Graduate School then updates faculty status online through MyGradProgram.