# THE GRADUATE PROSTHODONTICS PROGRAM SYLLABUS

# 2023

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> > (Revised and Updated April 26, 2024)

# **Program Description**

The Graduate Prosthodontic Program is formally named the University of Washington School of Dentistry Graduate Prosthodontics Program. It is organizationally positioned within the Department of Restorative Dentistry. The chair of the Restorative Department is Dr. Dan Chan. The graduate program includes instruction in fixed prosthodontics, removable prosthodontics, implant prosthodontics, perio-prostheses, and maxillofacial prosthetics, digital dentistry, and interdisciplinary treatment planning and treatment.

The didactic course of study consists of twelve consecutive quarters beginning in Summer Quarter each year. Students are expected to complete their requirements in clinical patient care and research activities by the end of the third year. It is understood that some students may take longer than twelve quarters to complete the program. If you have not completed graduation requirements, you must register for an additional quarter(s). If you are an international student, you must also extend your student visa. Any questions can be addressed to Akiko Koyama at akikok2@uw.edu. Formal courses and practical clinical experiences are designed to provide a challenging and stimulating program in all phases of prosthodontics with experience in research and teaching as well. Courses in related disciplines include dental materials, implant dentistry stomatology, epidemiology, occlusion, removable and fixed prosthodontics, digital dentistry, biostatistics and interdisciplinary treatment planning. Upon successful completion of the graduation requirements, the student will receive a Certificate in Prosthodontics. This certificate satisfies the requirements of the American Board of Prosthodontics to become board-eligible. The program also prepares the graduate for specialty practice or a career in dental education by offering a Master's degree. The degree of Master of Science in Dentistry (M.S.D.) requires planning and completing an acceptable research project in addition to didactic and clinical prosthodontic training (see section XI for more details).

Past graduates have been predominantly from the United States, but others have been from Canada, Great Britain, France, Taiwan, Italy, Spain, Singapore, Japan, Israel, Greece, Portugal, New Zealand, Kuwaiti, Mexico, Peru, India, Switzerland, Iceland, Iran, and Thailand. The principle means of recruitment are through the program's reputation, American Dental Association listing, American College of Prosthodontists listing, and announcements in the Journal of Prosthetic Dentistry. Admission is on a competitive basis for 3 positions per year. Foreign students must meet the requirements of the Graduate School, which include a minimum TOEFL score of 98. All final candidates are invited for an interview with the faculty prior to consideration for selection. They are also required to take a written and laboratory examination as a part of the interview process. A 3.0 GPA from dental school is required, with emphasis placed on performance in the third and fourth years.

The guidelines and policies of the University of Washington, School of Dentistry can be found at <a href="https://uwnetid.sharepoint.com/sites/sod/students/SitePages/Guidelines-%26-Policies.aspx">https://uwnetid.sharepoint.com/sites/sod/students/SitePages/Guidelines-%26-Policies.aspx</a>

#### **Program Goals**

#### **Didactic**

The program strives to provide a didactic basis for all specific areas of prosthodontics as well as related disciplines through formal courses and seminars. Two to three literature review seminars per week, given on a 2-year cycle, cover classic as well as current prosthodontic literature and provide a basis for in-depth faculty-student discussions.

# Clinical

Students are assigned adequate clinical load, selected by the faculty, which covers the broad range of specialty practice.

The program provides in-depth support and learning in both periodontics and orthodontics as they relate to the prosthodontic patient.

Student are expected to treat each patient to state-of-the-art quality, both from the clinical aspect as well as the laboratory. Laboratory excellence is considered essential as past experience has shown that the new graduate must train the technician to obtain the level of quality to which he/she has been accustomed in the program. Digital dentistry is also weaved into the clinical and laboratory portions of the patient treatments.

# PROGRAM GOALS AND OBJECTIVES

- 1. To produce prosthodontists who demonstrate proficiency in diagnosis, treatment planning and treatment of Prosthodontic patients. This objective is in accordance with the UW-SOD mission statement and criteria set forth by the American Dental Association Commission on Dental Accreditation (CODA).
- 2. To produce prosthodontists, who demonstrate proficiency in the management of patients requiring interdisciplinary treatment planning and treatment, and long-term supportive therapy.
- 3. To teach the student how to evaluate the dental literature for evidence-based conclusions and to apply this to the clinical practice of Prosthodontics.
- 4. To thoroughly prepare residents to successfully challenge the American Board of Prosthodontics to achieve board certification.
- 5. To produce prosthodontists who generate, disseminate, and preserve knowledge, and who serve the community and the specialty.
- 6. To produce prosthodontists who have experience in research methodology.

The program's mission is to produce clinically competent prosthodontists capable of successfully challenging the American Board of Prosthodontics who are committed to life-long learning and a lifetime of ethical practice, who value the doctor/patient relationship, who respect those with philosophical, cultural or physical differences and who are committed to the advancement of Prosthodontics as an ADA recognized specialty.

# GRADUATE PROSTHODONTIC PROGRAM

# FIRST YEAR

# **Summer Quarter, First Year**

Oral Med 580	2 credits	Radiology
ORTHO 580	2 credits	Functional Cranial Anatomy
PROS 560A	2 credits	Removable and Complete Dentures
PROS 560B	2 credits	Removable and Complete Dentures
PROS 572	1 credits	Special Topics in Prosthodontics
R.D. 582	1 credits	Current Literature Review/Orientation Literature
R.D. 589	2 credits	Review of the Literature in Occlusion
R.D. 600	2 credits	Independent Study/Research
R.D. 660	2 credits	Oral Rehabilitation

16 credits

# **Autumn Quarter, First Year**

ORTHO 582	1 credit	Adult Orthodontics Seminar
PERIO 582	1 credit	Periodontal Treatment Planning Seminar
PERIO 585	1 credit	Periodontal Therapy Seminar
PERIO 586	1 credit	Longitudinal Eval of Perio
PROS 571	1 credit	Prosthodontic Review of Literature
R.D. 570	1 credit	Review of Literature Seminar (ResD)
R.D. 580	1 credit	Treatment Planning Seminar
R.D. 582	1 credits	Current Literature Review
R.D. 588	2 credits	Masticatory Functional Analysis & Occlusal Adjustment
R.D. 590	2 credits	Fundamentals of Fixed Prosthodontics (includes Biostats)
R.D. 660	2 credits	Oral Rehabilitation

14 credits

# Winter Quarter. First Year

ORTHO 582	1 credit	Adult Orthodontics Seminar
PERIO 582	1 credit	Periodontal Treatment Planning Seminar
PERIO 585	1 credit	Periodontal Therapy Seminar
PERIO 586	1 credit	Longitudinal Evaluation of Periodontics
PROS 571	1 credit	Prosthodontic Review of Literature
R.D. 570	1 credit	Review of Literature Seminar (ResD)
R.D. 580	1 credit	Treatment Planning Seminar
R.D. 582	1 credits	Current Literature Review
R.D. 585	2 credits	Prosthodontic Dental Materials
R.D. 660	2 credits	Oral Rehabilitation

12 credits

# **Spring Quarter, First Year**

1 credit	Practice Management
3 credits	Clinical Stomatology
1 credit	Adult Orthodontics Seminar
1 credit	Treatment Planning Seminar
1 credit	Periodontal Therapy Seminar
1 credit	Longitudinal Evaluation of Periodontics
1 credit	Prosthodontic Review of Literature
1 credit	Review of Literature Seminar (ResD)
1 credit	Treatment Planning Seminar
1 credits	Current Literature Review
2 credits	Oral Rehabilitation
	3 credits 1 credit

# **SECOND YEAR**

# Summer Quarter, Second Year

OHS 571	2 credits	Clinical Epidemiology
ORTHO 582	1 credit	Adult Orthodontics Seminar
PROS 563	1 credit	Maxillofacial Prosthetics I Seminar
PROS 572	1 credit	Special Topics in Prosthodontics
R.D. 582	1 credits	Current Literature Review
R.D. 600	2 credits	Independent Study/Research
R.D. 660	2 credits	Oral Rehabilitation

10 credits

# **Autumn Quarter, Second Year**

ORTHO 582	1 credit	Adult Orthodontics Seminar
PERIO 561	2 credit	Case Management
PERIO 582	1 credit	Periodontal Treatment Planning Seminar
PERIO 585	1 credit	Periodontal Therapy Seminar
PERIO 586	1 credit	Longitudinal Evaluation of Periodontal Therapy
PROS 564	1 credit	Maxillofacial Prosthetics II
PROS 571	1 credit	Prosthodontic Review of Literature
R.D. 570	1 credit	Review of Literature Seminar (ResD)
R.D. 580	1 credit	Treatment Planning Seminar
R.D. 582	1 credits	Current Literature Review
R.D. 600	2 credits	Independent Study & Research
R.D. 660	2 credits	Oral Rehabilitation

15 credits

# Winter Quarter, Second Year

 $<sup>13 \</sup> or \ 14 credits \\ *offered biennially, alternating between the \ 1^{st} \ and \ 2^{nd} \ years$ 

ORAL M 570	2 credits	Oral Medicine and Therapy
ORTHO 582	1 credit	Adult Orthodontics Seminar
PERIO 561	2 credit	Periodontal Case Management
PERIO 582	1 credit	Periodontal Treatment Planning Seminar
PERIO 585	1 credit	Periodontal Therapy Seminar
PERIO 586	1 credit	Longitudinal Evaluation of Periodontal Therapy
PROS 571	1 credit	Prosthodontic Review of Literature
R.D. 570	1 credit	Review of Literature Seminar (ResD)
R.D. 580	1 credit	Treatment Planning Seminar
R.D. 582	1 credits	Current Literature Review
R.D. 600	2 credits	Independent Study/Research
R.D. 660	2 credits	Oral Rehabilitation
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16 credits

# **Spring Quarter, Second Year**

ENDO 568*	1 credit	Practice Management
ORTHO 582	1 credit	Adult Orthodontics Seminar
PERIO 582	1 credit	Periodontal Treatment Planning Seminar
PERIO 585	1 credit	Periodontal Therapy Seminar
PERIO 586	1 credit	Longitudinal Evaluation of Periodontal
		Therapy
PROS 571	1 credit	Prosthodontic Review of Literature
R.D. 570	1 credit	Review of Literature Seminar (ResD)
R.D. 580	1 credit	Treatment Planning Seminar
R.D. 582	1 credits	Current Literature Review
R.D. 600	2 credits	Independent Study/Research
R.D. 660	2 credits	Oral Rehabilitation

12 or 13credits

**THIRD YEAR**Autumn, Winter, Spring and Summer Quarters. Students will register for 4 credits, 2 in RD 600 and 2 in RD 660, but may attend the rest of the courses.

PERIO 577		Periodontal Implant Literature Review
PERIO 582		Periodontal Treatment Planning Seminar
PERIO 585		Periodontal Therapy Seminar
PERIO 586		Longitudinal Evaluation of Periodontal
		Therapy
PERIO 663		Pre-Pros Clinical Periodontics (elective)
PROS 660		Clinical Prosthodontics
R.D. 580		Treatment Planning Seminar
R.D. 582		Current Literature Review
R.D. 600	2 credits	Independent Study/Research
R.D. 660	2 credits	Oral Rehabilitation

4 credits minimum

<sup>\*</sup>offered biennially, alternating between the  $1^{\text{st}}$  and  $2^{\text{nd}}$  years

# COURSES IN THE GRADUATE PROSTHODONTIC CURRICULUM

# **Graduate Prosthodontic Courses:**

PROS 560	Complete Dentures. Lecture/clinical sessions devoted to the diagnosis and treatment of the completely edentulous and the immediate denture patient, with emphasis on management of patients with compromised anatomy. Implant supported and retained prostheses for the edentulous patient will also be emphasized.
PROS 562	<b>Removable Partial Dentures.</b> Lecture/seminar concentrating on factors peculiar to design and fabrication of removable partial dentures. Special attention will be given to combining fixed and removable partial dentures through precision attachments.
PROS 563	<b>Maxillofacial Prosthetics I.</b> Introductory lecture/seminar course with emphasis on systematic review and discussion of pertinent literature, study of case reports and the reliance of maxillofacial prosthetics on sound prosthodontic principles.
PROS 564	<b>Maxillofacial Prosthetics II.</b> Lecture/seminar augments 563. Diagnosis and detailed treatment planning and procedures for patients with anatomic or neurologic defects of the head and neck.
PROS 571	<b>Prosthodontic Literature Review Seminar.</b> Weekly seminar devoted to the review of prosthodontic and related literature.
PROS 572	<b>Special Topics Related to Prosthodontics.</b> A lecture/seminar course dealing with subjects which have a bearing on the comprehensive treatment of maxillofacial and regular prosthodontic patients. Topics included are surgery, speech, orthodontics, psychology, gerontology, and sociology.
PROS 665	Clinical Practice Teaching. Supervised experience in teaching clinical prosthodontics to the undergraduate dental student.
<b>RESD 570</b>	<b>Review of Literature Seminar (Restorative).</b> Continuous weekly seminar devoted to the review of prosthodontics and related literature.
RESD 580	Restorative Treatment Planning Seminar. A continuous weekly seminar to discuss controversial treatment problems and difficult diagnostic
RESD 582	cases.  Current Literature Review. A continuous weekly seminar to discuss assigned literature from selected journals.
RESD 585	<b>Prosthodontic Dental Materials.</b> Study of commonly used materials in the fabrication of dental appliances. Emphasis on resin systems and various precious and base-metal alloys.
RESD 588	Masticatory Functional Analysis and Occlusal Adjustment. A lecture clinic and lab course on the fundamentals of functional occlusal analysis and occlusal adjustment by selective grinding and tooth movement. The

course is offered in Autumn Quarter to first year Periodontic, Prosthodontic, and Orthodontic graduate students.

**RESD 589** 

**Review of Literature in Occlusion.** This course is in the first (summer) quarter for Periodontic and Prosthodontic graduate students. The course is designed to familiarize the student with pertinent related topics and prominent concepts in the field of occlusion. It provides the background knowledge needed by the practitioner involved in the management of patients with problems related to occlusion.

**RESD 590** 

**Fundamentals of Fixed Prosthodontics.** A weekly seminar/laboratory course in the techniques of indirect restorations.

**RESD 600** 

**Independent Study or Research.** Prerequisite: permission of Graduate Program Director. Residents are permitted to work on research during clinic time. Students are expected to develop a research protocol and form a research committee. The committee will consist of a faculty member who serve as the principle investigator, a biostatistician, an outside the department member, and the program director. The research protocol must be presented to the program director by the end of the first year.

**RESD 660** 

**Oral Rehabilitation.** Practical application of material covered in didactic courses in clinical prosthodontics.

**DENT 565** 

**Dental Photography and Imaging.** Provides student with sufficient knowledge and experience to select and use correct photographic equipment for photographing patients (facial and intraoral), casts, instruments, x-rays, charts, and objects.

#### **Courses in Other Departments:**

**DPHS 568** 

**Biostatistics and Research Design.** Instruction in basic biostatistics, emphasizing the integration of statistics with research design and including measures of central tendency, regression, correlation, chi-square, and comparison of samples. Offered on credit/no credit basis only.

**DPHS 569** 

Clinical Epidemiology and Study Design in Dentistry. The goal of this course is to provide you with a set of tools that will allow you to determine the degree of belief you can put into evidence that which is presented to you. In the first part of the course, a set of tools/principles that allow you to assess the quality of scientific evidence is introduced. Topics covered include the role of skepticism, biological plausibility, the importance of comparison and temporality in establishing causality, data torturing, the formulation of a research question, refutation, placebo effects, and scientific conflicts of interest. In the second part of this course, these general scientific principles are introduced within the context of three research designs: the case-control design, the cohort design, and the randomized controlled trial.

**ORAL M 570** 

**Oral Medicine and Therapy.** Lecture directed toward the presentation and discussion of oral diseases and oral manifestations of systemic disease. Primarily the clinical manifestations' relationship to generalized disease processes and patient management with in-depth discussions of therapy.

**ORAL M 580** 

**Radiology.** The goal of this course is to teach the students the finer points of reading radiologic films with an eye to the treatment of advanced or unique problems.

**ORAL B 574** 

**Clinical Stomatology.** Update and review of diseases of the oral cavity and jaw, with emphasis on recognition and diagnosis of the clinical lesion. Clinical cases discussed and student presentations supplement faculty lectures.

**ORTHO 580** 

**Functional Cranial Anatomy**. Lecture and laboratory centered around the dissection of the head and neck with didactic emphasis on functional anatomy and clinical applications.

**ORTHO 582** 

Adult Orthodontics (Interdisciplinary Dentistry). Seminar for orthodontic, periodontic and prosthodontic graduate students in comprehensive, integrated diagnosis and treatment planning of the dental problems of the adult patient.

**PERIO 561** 

**Periodontal Case Management.** The objectives of this formative course are to introduce basic principles of periodontal case management to develop a good understanding of diagnosis, classification of periodontal disease, prognosis, surgical versus non-surgical therapy, supportive maintenance therapy, and variety of surgical procedures. The course is a didactic presentation of clinical periodontics to provide comprehensive view of the field and a grasp of modern therapeutics.

**PERIO 577** 

**Implant Literature Review.** Concise review of the scientific periodontal literature with specific focus on studies of periodontal diagnosis, wound healing, periodontal regeneration, microbiology, and implant procedures.

**PERIO 582** 

**Periodontal Treatment Planning Seminar.** Weekly seminar involved with the presentation, discussion, and tentative solution of moderate to complex problems in diagnosis and treatment.

**PERIO 585** 

**Periodontal Therapy Seminar.** A weekly seminar utilizing the case review method and dealing with the treatment of moderate to advanced periodontal disease.

**PERIO 586** 

**Longitudinal Evaluation of Periodontal Therapy.** An in-depth examination of the progress of the case from the time of initial therapy, which will be as far back as 10 to 15 years, and its ongoing progression until the most recent maintenance visits to determine: (1) the efficacy of method, (2) the demands made upon the patient, and (3) the temporal effect of therapy and survival.

# CHAPTER II Clinical Objectives and Program Requirements

The following are **minimum** requirements for clinical patient treatments during the Prosthodontic Graduate Program. The successful completion of these requirements **MUST** include at least one case that satisfies Part 2, 3, and 4 of Section B of the Certifying Exam of the American Board of Prosthodontics (**ABP certifying exam**). The program director has the discretion to wave certain requirements based on the skill level of the resident and availability of patients. Residents are expected to be busy with patient treatment and attain an average monetary production is as follows:

1st Year: \$20,000

2<sup>nd</sup> Year: \$55,000

3<sup>rd</sup> Year: \$90,000

#### A. Fixed Prosthodontics

1. 2 patients requiring complete reconstructions (minimum of 12 units).

2. 2 patients requiring anterior esthetic restorations.

#### **B.** Removable Prosthodontics

- 1. 3 patients requiring complete dentures or overdentures.
- 2. 1 patient requiring a single complete denture opposing natural teeth.
- 3. 1 patients requiring removable partial dentures, conventional and/or precision, including at least one combination case (An RPD and four natural tooth preparations involved in the restoration of the patient).
- 4. 2 patients requiring an immediate denture.

# C. Implant Prosthodontics

- 1. 2 patients requiring a fixed complete dentures.
- 2. 1 patient requiring implant retained overdentures.
- 3. 1 patient requiring an implant supported fixed partial denture(s).
- 4. 5 patients requiring a single tooth implant prosthesis.

#### D. Surgical Placement of Dental Implants

5 patients requiring dental implants on sites with adequate soft and hard tissues (without soft or hard tissue augmentations).

# E. Maxillofacial Prosthetics

One patient requiring restoration of an acquired or congenital defect. Each resident will be assigned one quarter in the second year of the program to the maxillofacial prosthodontics clinic for a half day.

# F. Sleep Medicine/ TMD (Oral Medicine Rotation)

In the 3<sup>rd</sup> year of residency training, each resident will be assigned a rotation through the Oral Medicine Clinic to gain experience treating OSA and TMD patients. The assignment will be a half day per week for one quarter.

# **G.** Other Patients Assigned on Recall

- 1. Relines
- 2. Repairs
- 3. Re veneer (fixed complete dentures)
- 4. Adjustments

Students should closely monitor the number of patients they have so as to not have too few or too many. In addition, students will have the option to place implants and perform minor surgical procedures in the Graduate Periodontics facility at the discretion of the Graduate Periodontics program Director.

# G. Requirements for Graduation

To graduate and receive a Certificate in Prosthodontics, the following are required in addition to the clinical requirements:

1. The student must fulfill all academic and clinical requirements. However, the program director has the discretion to modify some requirements based on the skill level of the resident and patient availability.

# 2. Clinical requirements include

- a. 2 full mouth rehabilitations (FMR with a minimum of 12 units); 1 should include increasing OVD
- b. 3 complete denture opposing complete denture (CD/CD) or overdenture (OVD)
- c. 1 single complete denture opposing natural teeth or fixed restorations
- d. 1 removable partial denture (RPD)
- e. 2 immediate complete dentures (ICD)
- f. 2 fixed complete dentures (fixed-detachable)
- g. 2 re veneer of fixed complete denture
- h. 5 single tooth implant surgical placement
- i. 2 esthetic cases (as determined by program director)
- i. 2 relines of CDs
- k. 2 CD repairs
- 1. 1 long term recall (LTR)
- m. 1 short term recall (STR)
- 3. It will be necessary for the student to complete all of their patient treatments. A chart review will be conducted to evaluate and finalize the treatment as well as financial status of the patients to determine whether the students has completed all of their clinical requirements. Transfer of patients to classmates will be discussed and determined at this meeting as well.
- 4. The student is required to submit a digital copy of their cases with complete and thorough documentation including all radiographs, with a focus on pre- and post-treatment images. The images should be organized in the appropriate sequence according to the sequence of treatment. We will provide you with a form in your last quarter to be used to specify surgical procedures, implant brands, surgeon, ceramist, materials, etc. You are also required to organize your patient case boxes with the diagnostic casts, casts of the diagnostic wax-up, definitive casts, and mounted casts of the completed restoration.
- 5. The student will complete a written, multiple choice exam, such as the one they took when applying to the program, UNLESS they have passed the Section A of The American Board of Prosthodontics (ABP) certifying exam. The letter from the ABP confirming success should be provided to satisfy this requirement.

- 6. The student will provide a list of patients for whom they have placed implants, including number, brand, measurements and the position of the implant.
- 7. The grades in all of the student's classes will be reviewed; keep in mind that the average grade must not be lower than 3.0 on a 4.0 scale with no lower than a 2.7 in any one class.

# **H.** Requirements for Graduation with an M.S.D. Degree (see Chapter XI)

- 1. The student must fulfill all academic and clinical requirements as in **G**.
- 2. Students are required to complete an approved research project under the guidance of a single faculty member. This individual will serve as the chief advisor. The resident will also create an advisory committee of at least 3 faculty members. The chairman of the committee will be the Graduate Prosthodontic Program Director, who may also be a part of the advisory committee. The committee will determine if the quality of the paper warrants submission for publication and satisfies the graduate program requirements. Topics for the paper will be approved by the chairman of the committee. The topic selected can be on any area of prosthodontics.
- 3. Thesis defense must be complete by the end of the 2<sup>nd</sup> week of June during the year of graduation by way of a formal lecture presentation to the committee members. The faculty member who is the chief advisor to the resident will serve as the host for the presentation. Additionally, students are required to prepare a manuscript suitable for submission to the Journal of Prosthetic Dentistry or another journal of equivalent quality based on their research. That paper must first be submitted to the advisory committee for review at least 2 weeks before the presentation.
- 4. Successful defense of the thesis will result in the award of a Master's of Science in Dentistry (MSD) upon completion of the clinical and academic requirements.

# I. Laboratory Requirements

Removable - All except frameworks

Fixed- The student must perform laboratory procedures as required by Graduate Prosthodontic faculty. Additionally, keep in mind that you must be aware of the guidelines for the Certifying Exam of the ABP for the Part 2, 3, and 4 cases. This means that you have the proper documentation (photos and casts) for presentation.

# J. Requirements for Satisfactory Progress

1. General requirements for satisfactory progress are described in **Graduate School Memorandum No. 16** (revised March 2010).

- 2. The student must maintain a 3.0 grade-point average and a minimum of 2.7 for any individual course. This will be reviewed at the end of Spring Quarter of the first year, and quarterly after that time. Failure to maintain this average will result in action as described in **Graduate School Memorandum No. 16.**
- 3. The student must complete his/her course work within the twelve quarters of the program. Failure to finish in time will result in action as described in **Graduate School Memorandum No. 16**. This does not apply to research (RESD 600) or patient treatment (RESD 660). Extensions are granted for those circumstances, however the student will have to register for each additional quarter necessary to complete patient treatments and/or research.
- 4. The student must conduct himself/herself in a professional manner in dealing with patients, faculty, staff and fellow students. Problems in this regard will be reviewed by the Program Director. Initial action will be counseling of the student regarding the nature of the problem and the recommended steps for correction. Subsequent action would include formal warning, probation, and dismissal for failure to comply. If a student has a problem with patients, faculty, staff, or fellow residents, the program director has an open door policy to discuss and resolve these matters.

#### **CHAPTER III**

#### PATIENT CARE GUIDELINES

#### A. Procedures and Records

# **Patient Assignment**

1. You will be assigned a group of patients soon after the beginning of the summer quarter, some of whom have been waiting for over a year to begin their treatment. IT IS ESSENTIAL THAT YOU CONTACT <u>ALL</u> YOUR PATIENTS WITHIN THE FIRST TWO WEEKS OF THE FALL QUARTER! You must make a chart entry (phone log) indicating the date on which you contacted the patient and a brief description of their current situation.

It is obvious that you cannot begin treatment on all these patients at the same time and you will need to prioritize treatment. However, patients do want to know that you are going to treat them and that you are interested in their current oral condition. It will be up to you to decide upon the order in which you will appoint them for a comprehensive exam with the exception of those assigned for a particular course of instruction.

- 2. After appropriate examination and diagnostic procedures are completed, a tentative treatment plan, separate from the patient's record, will be developed. Once the treatment plan is finalized, it must be added to axiUm (EHR/Treatment Plans). axiUm is the software that the SOD uses to manage patient treatments <a href="https://dental.washington.edu/policies/clinic-policy-manual/health-information-management/">https://dental.washington.edu/policies/clinic-policy-manual/health-information-management/</a>. All treatment plans are to be submitted to the program director in the form of a Power Point or Keynote presentation along with mounted casts. Residents are expected to come up with a treatment sequence and treatment phases. This will also be recorded in axiUm. All presentations must be added to the patient folder on Share Point (Documents/Graduating Residents of the Future/Resident Name/Patient Name). The uploaded presentation should be in Microsoft Power Point since Keynote format is not supported.
- 3. In consultation with the Program Director, either a faculty member or the program director will direct the patient treatment with the resident. This faculty member must agree upon the final treatment plan and the sequence of appointments documented in axiUm. Subsequent treatment plan changes must be approved by the assigned graduate faculty member.
- 4. The student will prepare a patient letter that is both a financial contract and an informed consent document for signatures by the patient and the Director or Assistant Director, as well as the student, and submit it to the assigned faculty for suggestions. The student will also submit a final draft to the Grad Pros Clinic Manager (Carole Green) mailto:ckg2@uw.edu for editing and final printing. The signed contract will be scanned into the patient's chart (axiUm) and a copy given to the patient. Payment entries are recorded in axiUm. The student will also keep a copy in the student's patient file. Sample patient letters are available from the

Grad Pros Program Coordinator or Clinic Manager. **The contract must also state the risks of no treatment.** The contract should not leave the clinic until it is signed by all three parties.

Should any major changes occur in the treatment plan (resulting in a change in cost of \$1,000 or more) a supplemental patient letter (Addendum to Treatment) must be prepared as described above with the same disposition of signed copies.

After the contract/letter or addendum is signed, the student is responsible for entering the treatment plan (using the assigned CPT codes) into the AxiUm system for billing and treatment tracking purposes.

# NO TREATMENT MAY BE PERFORMED WITHOUT A SIGNED CONTRACT except for special circumstances subject to the Director's approval.

5. Continuous monitoring and the evaluation of treatment is carried out by an attending graduate faculty member. The name of the attending faculty should always be recorded in the chart entry.

Major steps are (by treatment type):

# **Complete and Immediate Dentures**

Initial Diagnosis and Treatment Plan
Initial Impressions
Final Impressions
Clinical Try-in (must be electronically approved by the patient and faculty.
Insertion

#### **Removable Partial Dentures**

Initial Diagnosis and Treatment Plan Initial Impressions Framework Design Framework Try-in Clinical Try-in Insertion

#### **Single Crowns and Fixed Partial Dentures**

Initial Diagnosis and Treatment Plan
Diagnostic Wax-up
Provisionals
Preparations and Final Impressions
Final Wax-up
Metal framework (in mouth or on model)
Digital Workflow and Proposal
Esthetic Try-in
Immediately Prior to Cementation
Final Documentation

# **Implant Prostheses**

Initial Diagnosis and Treatment Plan Digital Treatment Plan Surgical Guide Interim restorations Metal Try-in Clinical Try-in Insertion Final Documentation

#### **Implant Placement**

Initial Diagnosis and Treatment Plan (restorative) CBCT Evaluation Surgical treatment plan with attending faculty Surgical Guide Implant placement Final Documentation

#### **Maxillofacial Prostheses**

As determined by directing faculty member (Dr. Sutton)

6. The program director and clinic manager will regularly audit the student's patient list (Chart Review) that includes patient assignments/progress/completion status. The review will also be used as the final disposition document for all patient treatments at the completion of the program and will serve as a means to clear the student for graduation/certification.

As phases of the treatment are completed, you **MUST** go into axiUm and mark those phases as "Complete", so that the patient's financial account has an accurate description of which treatment has been completed and what has already been paid.

You will also be required to make entries relative to materials used. This includes manufacturer and styles of prosthetic teeth, metal types, implant manufacturers and types, implant abutments, and materials.

#### 7. Chart Request

UW School of Dentistry is currently using axiUm software for all patient management. Charts of older patients are still available if needed. Please check with Carole.

#### **CHART PROTOCOL**

- A. After treatment is completed for that visit, the student enters the daily chart entry into axiUm.
- B. All completed treatment must be marked "Complete" in axiUm, and the office staff must be notified so that it can be billed.
- C. Any correspondence with a patient by telephone must be recorded in the phone log in axiUm.

D. Please see requirements and expectations for using axiUm https://dental.washington.edu/policies/clinic-policy-manual/health-information-management/

Charts entries must be kept current with treatment plans, correspondence, progress note entries, financial contracts (performed by clinic staff), and treatment status on the day they occur. Please enter chart notes on the day of treatment and have faculty swipe them as approved.

- 8. All completed patients must be seen with a graduate faculty member 1-2 month after placement for recall evaluation and final disposition.
- 9. Students are responsible for providing all follow-up care for their patients, including oral hygiene, until they complete the program. Students will recommend a level of follow-up care for each completed patient as a part of their exit requirements. Patients will then be encouraged to see their general dentist for recall maintenance.

#### **B.** Patient Finances

- 1. Once a <u>treatment plan with its associated fees</u> has been accepted by the patient, payment arrangements are finalized by the Graduate Prosthodontic Clinic Manager (Carole Green) prior to initiating treatment.
- 2. Treatment plans totaling under \$10,000.00 require a 50% deposit to initiate treatment and the balance paid in full no later than the final impression date (for fixed prosthodontic care) or at try-in date (for removable prosthodontic care).

Treatment plans totaling over \$10,000.00 require:

Payment in equal thirds with one third at the start of definitive treatment, the second third at the final impression stage and the final third before insertion of the definitive prostheses.

# 3. Receipt of Payments

Payments are delivered by the patient directly to the Graduate Prosthodontic Clinic Manager. All payments are immediately recorded by the Clinic Manager and a receipt provided to the patient.

Patient payments need to be monitored by the graduate student for compliance with the contracted terms. Students may always ask the Clinic Manager about the patient's payment status. Should patients fall behind on payments, the Program Director should be notified as soon as possible. **Insertion of any prostheses must not occur until final payment has been made.** Exception to this rule can only be made through the Program Director.

#### 4. Charge Submission

Charge entry is performed in accordance with the contract terms for the case. Students will enter the proposed treatment plan into the axiUm system AFTER the Clinic Manager has checked the CPT codes and totals of the contract, and the patient and Program Director have signed the contract. The completion of every stage of treatment MUST be entered into axiUm to ensure accurate billing of the patient.

Because of the nature of axiUm, all treatments are itemized, there is no difference between entering insured or uninsured patients.

# 5. Referrals to other departments

Procedures referred to other clinics, such as surgery performed in Graduate Periodontics, are charged by the clinic in which treatment was performed. Payment is made in compliance with standard SOD procedures and is not included in the Graduate Prosthodontics payment contract.

#### C. Patient Recall

The student will be assigned patients for recall examination and/or adjustment on a rotating basis by the Clinic Manager. Should the patient require more than routine prophylaxis or other minor therapy, an appropriate appointment time should be scheduled. Clinical experience will be gained with minimal expenditure of clinic time and students will develop a better understanding of the continuing care needed with prosthodontic treatment. Patients must be clearly informed as to the cost of any definitive procedures before beginning treatment and appropriate chart entries must be made. Treatment changes of any magnitude will require a treatment plan modification or the development of a new treatment plan with appropriate signatures. The need for extensive re-treatment or adjustment may necessitate reassignment by the Program Director or Assistant Program Director.

# D. Faculty Coverage for Graduate Student Patient Care

Students are encouraged to seek advisory from multiple faculty, however it is required that students should identify one fulltime faculty as the attending faculty for each patient's care. Students should report to the attending faculty and get approval if there are any major changes of the treatment plan.

Graduate faculty will be assigned for regularly scheduled clinic sessions. In the intervals between quarters, instruction will be provided only when scheduled in advance.

Working on patients after hours (after 5:00 on weekdays, anytime on weekends) is not allowed except for emergencies after consultation with the Program Director or the Assistant Program Director. Seeing patients after hours places the student at risk for possible charges of mistreatment, as well as reducing the chances of obtaining immediate assistance for medical emergencies.

#### E. Infection Control in the Dental Environment

Graduate students are expected to be familiar with the COVID Control Policy and the School's Infection Control Policy and to comply with the guidelines. A copy of <u>Infection Control in the Dental Environment</u> is kept in the B-469 Clinic Dispensary area and the COVID Control Policy is maintained in the clinic. Additionally,

- 1. Students are not allowed to wear contaminated gloves or gowns outside of the treatment area. All prostheses will be disinfected prior to leaving the treatment area. Exposure of the prosthesis to the disinfectant for the proper contact time is essential for infection control.
- 2. When using the pumice wheel, the student is expected to dose out an amount of pumice onto a plastic covering at the polishing station. A sterilized rag wheel will be used for each patient and when finished, the rag wheel will be placed in the appropriate bin for sterilization.
- 3. Failure to comply with proper infection control procedures will result in disciplinary action ranging from probation to dismissal from the program.

#### **CHAPTER IV**

#### PERSONAL HYGIENE AND APPEARANCE

(Extracted from <u>Infection Control in the Dental Environment</u>, the University of Washington School of Dentistry, Revised January 1997)

# **Policy:**

A neat, clean professional appearance while engaged in patient treatment is required. Students are expected to wear clinical scrubs when working in the clinic. Such a professional appearance communicates an image of quality work, and respect for the patient's well-being.

# **Implementation:**

# A. Personal Hygiene:

- 1. Hair shall be cleared away from the face, and should not contact the patient, operatory light handle, or the area of operation.
- 2. Facial hair shall be covered by a face mask or shield.
- 3. Jewelry or watches shall not be worn on the hands or arms during patient treatment.
- 4. Nails must be kept clean and short.
- 5. Watches and necklaces with long chains must be worn inside the clinic gown.
- 6. Individuals with injured, cracked skin or dermatitis should exercise particular caution when treating patients until the lesions are healed.
- 7. Eating shall be confined to lounge or eating facilities and must not be done in clinics or laboratories. No smoking is allowed in the Health Sciences complex.

#### B. Hand washing:

- 1. Hand washing is mandatory before gloving, after de gloving, after handling items that may have been contaminated by patient contact, or when hands are obviously soiled.
  - a. Hands are to be washed before the appointment, after gloves are removed before leaving the operatory, and again on re-entering the operatory prior to re gloving. They should also be washed prior to re gloving if gloves are torn.
  - b. Hand washing is required following toilet use, before eating and after contact with your hair, face, or glasses.

- 2. Routine hand washing for dental clinical and laboratory procedures should involve the following:
  - a. Remove visible debris from hands and arms using appropriate solvents or cleaners if required.
  - b. Skin must not be abraded with brushes or sharp instruments.
  - c. Wet hands and wrists under cool running water.
  - d. Rub antibacterial hand soap gently into all areas, especially between fingers and around nails, for at least 15 seconds before rinsing under cool water.
  - e. Repeat the washing and rinsing, and thoroughly dry with paper towels.

# C. Personal Appearance and Attire:

Clinical attire for dental procedures should always be used to protect against contamination of other clothing and should be changed daily or when visibly soiled. Attire for those involved in patient care shall include the following:

#### **Clinic Attire**

# **General Dress Requirements**

- 1. A neat, clean professional appearance while engaged in patient care is required. Such a professional appearance communicates an image of quality work, and respect for the patient's well-being. Students are expected to wear clinical scrubs when working in the clinic.
- 2. Clinic Gowns must not be worn in restrooms. Hooks are provided outside restrooms to hang clinic gowns before entering.
- 3. Name tags or photo ID badges will be used on the white clinic coat/jacket and will include the individual's name and *UW School of Dentistry* designation. The white clinic coat is not worn for patient treatment.
- 4. Faculty, students, and staff must wear shoes and socks (nylon hose is acceptable) when *entering* a clinic or laboratory. Shoes must be clean and well-maintained and appropriate, (e.g., no torn or dirty athletic shoes, work shoes/boots, sandals, or shoes without socks or nylons).
- 5. Clinical or laboratory attire used in the patient care process is only to be worn in the clinics and adjacent hallways.
- 6. Persons with facial or head hair of a length that may contact operating instruments, materials, or the operative field while the operator is in working position or during treatment room preparation, must contain the hair. Beards must not protrude forward of the surgical mask.

#### **Student and Staff Gowns**

Moisture resistant gowns will be used by all students and staff during patient care. The garments are designed to provide additional protection to skin and clothing from potentially saturating contamination. They are to be placed in the appropriate laundry bags or designated cabinet located in each clinic prior to leaving the clinic. Clinic garments must not be taken home. Name tags are not to be used as the pin holes will reduce the moisture resistant protection.

# **Laboratory Attire**

Laboratory gowns or coats should be worn during laboratory procedures producing splatter, aerosols, or dust in order to protect clothing from contamination. Gowns designated for use in the clinic are not to be used as laboratory attire.

#### **CHAPTER V**

#### USE OF FACILITIES IN THE GRAD PROS CLINIC

# A. Patient Scheduling

1. Each student has their own operatory. The student will schedule patient appointments via axiUm. The student will indicate the procedures to be performed so that appropriate instruments can be made available by the assistants. Special instrument requests must be made well in advance to ensure that the assistants can comply with the necessary sterilization requirements. Students treating patients before clinic opens at 9:00 cannot expect assistance unless scheduled. Students who don't complete patient treatment before the assistants leave for the day will be responsible for cleaning the unit/operatory so that it will be ready for use the following clinic session.

#### B. Use of Laboratories

- 1. Individual space is assigned to each graduate student in the Graduate Prosthodontic Lab.
- 2. Locker space is provided outside the Graduate Prosthodontic Lab.
- 3. Students are responsible for daily cleaning up of the laboratory. Students are assigned responsibility for lab cleanup on a rotating basis. Failure to maintain work areas in a suitable state of order can result in restriction in the use of facilities until these deficiencies are corrected.
- 4. The Graduate Prosthodontics laboratory and attendant resources exist for the use of students enrolled in the Graduate Prosthodontics program. Pre-doctoral students have their own lab and resources for processing dentures and other prostheses. Please do not process dentures or other prostheses for Pre-doctoral students in the Graduate Prosthodontics laboratory.

#### C. Use of Instruments

A complete separation of clinical and laboratory instruments must be maintained. Staff personnel have marked clinical instruments and equipment with yellow bands. Graduate students must purchase their own handpieces and burs for patient treatment.

# D. Use of Assistants

Since we are limited to two assistants, students must schedule those times when they must have an assistant. Assistants, as state employees, are forbidden by law to work more than 40 hours a week or more than 8 hours a day, so do not expect assistance outside normal clinic hours. Should assistants be required to work through lunch time for special situations (e.g., full-mouth final impressions) scheduling must allow a lunch break before they are again needed.

# **CHAPTER VI**

#### USE OF PROSTHODONTIC LABORATORY

- A. The graduate prosthodontic resident will be assigned a lab bench for all of your laboratory work. You are expected to keep the area safe, clean, and disinfected.
- B. Denture processing, repairs, and relines of removable prostheses will be done by the graduate student. Procedures that require the help of the lab technician will be scheduled in advance. Some procedures can take up to a week to complete so patients should be informed accordingly.
- C. All removable partial denture frameworks for commercial laboratories must be sent out through either the Program Coordinator or the Clinic Manager with a completed work authorization signed by the program director or assigned faculty.
- D. Occasionally, help can be provided by the D-4 laboratory. This lab is maintained primarily to facilitate the flow of work for the predoctoral students and will only be used rarely by Graduate Prosthodontic residents. However, the D-4 laboratory staff do wish to facilitate your patient care and would be happy to meet with you at any time.
- E. The graduate prosthodontics lab technician is in charge of the lab, in coordination with the program director and assistant program director.

# **CHAPTER VII**

#### WORK DELEGATION TO COMMERCIAL LABORATORIES

#### A. Crowns and Fixed Partial Dentures

It will be necessary to send most cases to an outside laboratory under the School of Dentistry contract system.

#### WHEN YOU SEND ONE OF YOUR CASES TO AN OUTSIDE LAB:

Before work can be sent to a contract laboratory:

- 1. Treatment plans must be developed and approved by the Program Director. The laboratory will be chosen by the Program Director or Assistant Program Director. The lab prescription MUST be signed by the Program Director or a faculty member who has been granted that authority by the Director. A copy of the prescription must be maintained in the patient's case pan. Patients generally will pay two-thirds of the fee prior to any work being sent to the laboratory.
- 2. The Graduate Prosthodontic program already has several labs contracted to provide fixed, removable, and implant prosthodontic prostheses. Students are not allowed to contract with labs individually.
- 3. Packaging is the responsibility of the student. Boxes and packing materials are available in Graduate Prosthodontic lab. Cases for local labs will be picked up in the clinic. The Program Coordinator will prepare the mailing label and make sure the package is sent for labs that are not local.
- 4. Digital files sent to laboratories are identified by the file nomenclature that consists of the resident's last name and the initials of the patient.

# **B.** Removable Partial Dentures

- 1. Complete the work authorization (prescription) and design under the faculty member who is working with you on the patient.
- 2. Two casts are sent to the laboratory: 1) a master cast poured in improved stone and 2) an example cast poured in dental stone. The master cast should have the path of insertion marked on it, and the example cast should have the detailed design drawn on the cast. The color coding should be consistent with that in the RPD syllabi. Additionally, casts can be scanned to create a .STL file which can be securely and digitally sent to the lab.
- 3. The graduate faculty member must sign the work authorization.
- 4. Work is sent out through the Clinic Manager or Program Coordinator.

#### **CHAPTER VIII**

#### **DOCUMENTATION OF PATIENT TREATMENT**

- A. Since the School of Dentistry is responsible for the maintenance of those patients treated by the graduate student, the Department must maintain certain records and components of treatment as permanent documentation of the care provided. This is not only to comply with legal responsibilities of the School but also for the recall of the patients and for any continuing therapy that may be required.
  - 1. Photographs/Image Files

Patient photographs are required to be uploaded to the Share Point folder for patient records. Subsequent students will need these records to continue patient treatment and/or for recall appointments. Students are expected to completely document the treatment of each case assigned and provide the department with an original of the pertinent steps. The complete documentation will be necessary for challenging the American Board of Prosthodontics certifying exam or State Boards in the future. The selected documentation will remain with the Department for use in follow-up care or for teaching purposes (where proper acknowledgment will be made for their use). The Department is interested primarily in those cases that would serve as short or long-term recall patients. Image files should show:

Pre-op sextants, x-radiographs and charting Post-perio sextants Post-treatment sextants and radiographs Full face, before and after

Complete denture patients with special challenges and results may also be documented.

Students will be responsible for purchasing a good quality digital camera, and for processing and storing the images until graduation.

Also, students must remember to have their patients fill out an <u>Authorization to Use or Disclose Photography/Video Tape</u> form. HIPAA requires that we inform patients that their image may be used in the school for teaching purposes, as well as in journal articles written, and lectures given by the students or faculty of the program. Please date the forms to expire **FIVE YEARS** from the date it is signed. This is to give the student ample time to complete the case and publish any articles in which the student may wish to use the case. This form is required only for photos of the patient's full face, or if they have any unique identifying marks or characteristics that would make them easily identifiable even if it is not a full face image.

#### **CHAPTER IX**

#### **SUPPLIES**

#### A. Dental Supplies and Equipment

Expendable items are stocked by the dental assistants. It is the responsibility of the student to alert the assistant when supply levels run low. Students wishing to use materials other than those normally supplied must clear any purchase requests through the Director. It is not the intent of the program to experiment with new materials unless there is strong evidence to support a change. The program strives to teach techniques that are relatively independent of change in materials, with the result that students can apply the techniques to materials of their choosing once they are out of training. Budget restrictions will inevitably limit the number of new materials and equipment that can be brought into the program.

These supplies are for the use of the Graduate Prosthodontics program for coursework and patient treatment. Please check with the Clinic Manager or Program Director before loaning materials to students in other programs.

Requests for supplies or major items of equipment will need to be submitted through the Director to the Department Chair for possible purchase.

# B. High Noble/Noble Alloys

Requests for all alloys are to be made on the Dental Gold Requisition Form. The student will ask the Clinic Manager for one of these numbered forms. Before being presented to a Graduate Faculty member for a signature, the student will fill out the top part, including the patient's name and chart number, date, student's name, and the procedure number (CPT Code).

The student will take the request to obtain the alloy to the Program Director. Requests for alloys not normally stocked will need to be made through the Director. The student is responsible for the alloy once it has been received.

The student is responsible for determining the optimum amount of metal to be cast by weighing wax patterns and sprues using specific gravity data. After the student and faculty member determine the weight of gold required, the student will take the form back to the Clinic Manager to dispense the gold.

Gold is dispensed with half of the weight in new gold and half in buttons. After the casting is done, the student will return the leftover buttons to the Clinic Manager. They will weigh the buttons and the student will sign the Gold Inventory Book next to the recorded button weight.

Metal issued for one case cannot be used to cast a different case. Buttons must be returned after casting in the envelopes in which the metal was dispensed to the student. Buttons will be turned in by the 1st of each month at the latest. A precious metal audit will take place on the 10th of each month.

When alloys are sent to outside labs, the amount of alloy must be recorded in the progress notes as well as on the Form.

Students must reconcile all metal expenditures two weeks before graduating.

# C. Stationary, Photocopy and Audiovisual Supplies and Keys

- 1. Each student is responsible for his/her own supplies. This includes stationery supplies, except for official correspondence through the Grad Pros Program Coordinator.
- 2. The student assigned to present in Treatment Planning Seminar is authorized to make copies of the data on the clinic copier for each attending faculty. A PDF copy will be sent to fellow students.
- 3. A set of keys and a Prox card will be issued to you when you enter the Program giving you access to the building and all necessary work areas. These keys are your responsibility and present a security risk if you lose them. They are to be returned to the Grad Pros Program Coordinator when you finish the Program.

# **CHAPTER X**

#### SECRETARIAL SERVICES

- A. The program does not provide typing services for students, however the Program Coordinator may be available for help with letters or forms needed by the student.
- B. Patient contract letters will be approved by the graduate faculty member who is supervising that patient's care. The draft letter should be emailed to the Clinic Supervisor to proof for form and spelling. The Clinic Supervisor will then print the letter on letterhead.
- C. Faxing. There is a fax machine in the Restorative Department (Room D770) for departmental and clinic business. The number is 206-543-7783. Please ask either the Program Coordinator or the staff in the D770 office for assistance.

# PHONE SERVICES

A UWATTS line is provided in Graduate Prosthodontic clinic for use by students and staff for **official calls only** (contacting patients and laboratories within the continental USA). **No other method of long distance calls is authorized.** The department receives a monthly print-out of all calls made and monitors them by caller using a turn-in slip provided by the Restorative Department administration staff. Students, staff and faculty will use the phone report slips for all UWATTS calls.

#### **CHAPTER XI**

#### GRADUATE STUDENT RESEARCH

# A. Purpose of Research

The purpose of the research requirement is to provide training in research methodology. The results of the research project can be presented as follows:

To produce a manuscript suitable for publication in the Journal of Prosthetic Dentistry or other juried journals. The manuscript must adhere to the guidelines for publication in the journal to which it is submitted.

The project must lend itself to *quantification* and *documentation* of results. Development of a new clinical procedure without measurement of its effectiveness will not satisfy the requirement.

The manuscript must be in its completed form and ready for submission before the warrant for the M.S.D. is signed. It is due to the Research Committee 1 week before the date of the presentation and must be written using an American English version of Word for Windows. The deadline for the presentation is the end of  $2^{nd}$  week of June in the year of graduation. If the student is ready before that time, arrangements can be made for an earlier presentation.

#### B. Research Committee

The Graduate Prosthodontic Director, with input from the student, will select a preceptor from the members of the graduate faculty.

The Research Committee must consist of at least 3 members and will be selected by the student with help from your preceptor. Consideration should be given to faculty who can bring input to the research. The following guidelines should be kept in mind:

- The Graduate Prosthodontic Program Director will chair the Research Committee for each student.
- Depending on the project, at least one member should be a research methodologist (e.g. biostatistician or epidemiologist), a basic scientist, or an experienced researcher, without necessarily having specific subject-matter expertise on the student's research topic.
- Consider expanding the committee to include a junior faculty member who can help to develop his/her mentoring skills through committee participation.
- Two or more of the above roles may be filled by the same faculty member (i.e. the program director can be a committee member and the chair of the committee).
- The following from the Restorative Department can serve as chair of the Research Committee. If you would like someone outside the department to serve as chair of your research committee, please discuss this with the program director.

- o Dr. Van Ramos, Jr.
- o Dr. Alan Sutton
- o Dr. John Sorensen
- o Dr. Hai Zhang
- o Dr. Albert Chung
- o Dr. Yen-Wei Chen
- o Dr. Alireza Sadr
- o Dr. Dan Chan
- o Dr. Alvin Wee

The student must also choose a statistician and a member outside the department.

#### C. Timetable

First Year

**Summer Quarter** Research Proposal Course

Dr.'s Sorensen and Zhang

Fall Quarter Figure out research topic

Winter Quarter (end) Selection of topic, advisor and committee

members.

Spring Quarter (end) Proposal is complete and approved by advisor

and committee members

Second Year

Summer Quarter Data collection is initiated

Fall Quarter Data collection continued

Winter Quarter Data collection continued

Spring Quarter Data collection continued

**Third Year** 

Summer Quarter Data collection continued

Fall Quarter Data analyses complete and results reported

Winter Quarter Data analyses complete and results reported

Spring Quarter Final Examination (defense).

**Manuscript ready for publication** 

#### D. Deadlines

1. See Appendix C for deadlines for research progress reports.

- 2. Graduate students who expect to complete their requirements for degrees in Spring Quarter of the third year must make application for the degree at the Graduate School during the first two weeks of Spring Quarter (no later than the second Friday in the quarter). You must apply to graduate in the FIRST TWO WEEKS OF THE QUARTER regardless of which quarter in which you wish to graduate.
- 3. When the final examination on the research (thesis defense) is completed and the application approved by the student's research committee, the warrant must be signed and the box "APPROVED FOR GRADUATION" checked. Return the warrant to the Program Coordinator and she will keep it on file and electronically signify to the Graduate School that you may graduate.
- **E.** Applications are good for two consecutive quarters only. It is required that a graduate student be registered for at least 1 credit of RD 600 (Independent Research) in the quarter in which the requirements are completed.
- F. The filing of the application for the MSD in the Graduate School is solely the responsibility of the graduate student. The program coordinator will send a reminder to the student.

# **G.** Research Projects

The student is free to select a project which is particularly interesting to him/her. If the student prefers, there are on-going projects conducted by the faculty in which there are opportunities for participation. The student must speak with the program director before settling on a project. A research proposal will be expected in order to clarify the project.

# H. Research Funding

Students are encouraged to actively apply for external funding for his/her research projects. Possible funding sources include NIH/NIDCR, professional organizations (such as ACP, AAFP, AO, etc.), industry (such as dental material companies or dental implant companies), etc. If such effort is not successful, the research mentor should find ways to cover the cost. The Program Director will decide whether the program can cover part/all of the cost of study if neither of the above succeeds.

The American College of Prosthodontists sponsors the John J. Sharry Research Competition. More information can be found at this link:

https://www.prosthodontics.org/acp-education-foundation/grants-awards/

The American Academy of Fixed Prosthodontics sponsors the Stanley D. Tylman Research Program. More information can be found at this link:

http://www.fixedprosthodontics.org/tylman require.html

# I. Human Subjects

- 1. Research involving human subjects, without exception, involves the signing of informed consent. A form must be designed for this purpose and approved by the Human Subjects Committee and the Institutional Review Board (IRB).
- 2. The safety of human subjects must be insured.

3. Projects which involve procedures not primarily of benefit to the patient or psychological testing must be approved by the Health Sciences Review Committee. These procedures are described in the University Handbook (which can be found online at:

http://www.washington.edu/faculty/facsenate/handbook/Volume4.html), Volume IV, part II.

#### J. Equipment or Materials Obtained on Grants

Any materials or equipment which is purchased on a grant which was made to the University of Washington or to the student for his research at the University remains the property of the Graduate Program in Prosthodontics.

# **K.** Conflict of Interest

University and Dental School Policy on the broad topic of Conflict of Interest, especially as it relates to research activities, is covered in a document entitled "Report of the Research Advisory Committee of the School of Dentistry on Policies Concerning Misconduct in Sciences and Conflict of Interest Relating to Research and Research Funding" which is on file in the Prosthodontic Department Office.

Major topics of concern to the Graduate Prosthodontic Program have been extracted for your information:

1) University of Washington Administrative Policy Statements (at http://www.washington.edu/admin/rules/APS/47.02.html)

University facilities and equipment are to be used to support its teaching, research and administrative functions. Faculty and staff (and by inference, students) are <u>not</u> permitted to use University facilities and equipment for personal purposes or for activities from which they derive personal remuneration. This policy is extended to cover University stationery and other office supplies.

2) Research supported by commercial concerns:

Care must be exercised in developing Grad Pros research protocols when commercial concerns are approached for support, usually in the form of providing components for testing. Any contacts with commercial enterprises must come through the Director of Research or the Program Director.

3) Scientific Integrity: University rules

(<u>Handbook</u>, http://www.washington.edu/faculty/facsenate/handbook/Volume4.html) defines scientific and scholarly misconduct to include the following forms of inappropriate activities:

- A) Intentional misrepresentation of credentials
- B) Falsification of data
- C) Plagiarism
- D) Abuse of confidentiality
- E) Deliberate violation of regulations applicable to research.

Violation in any of these activities will initiate appropriate disciplinary or dismissal action in accordance with the University Student Conduct Code.

### **CHAPTER XII**

#### **PUBLICATIONS**

### **Guidelines for Publication of Research**

- 1. Faculty who assist you should be listed as secondary authors. Your preceptor is always listed as a secondary author, as well as any other faculty who have made a major contribution to your research.
- 2. The article should clearly acknowledge that the research was done in the Graduate Program in Prosthodontics, School of Dentistry, University of Washington. If another institution was involved in the research, this should also be clearly acknowledged.
- 3. Research projects will be prepared for publication before the M.S.D. warrant is signed and the degree awarded.

#### **CHAPTER XIII**

#### **DEPARTMENTAL LIBRARY**

The Graduate Prosthodontics library in D-683A is available for the graduate students. Please bear in mind that other departments also use the library as a conference room from time to time, so please check the posted schedule before entering. A complete set of Journals of Prosthetic Dentistry is available along with issues of the International Journal of Prosthodontics, the International Journal of Periodontics and Restorative Dentistry, the International Journal of Oral and Maxillofacial Implants, and a number of textbooks. Posted guidelines for use are to be followed without exception.

The books in our library are arranged by subject, and alphabetized by author within the subject, and have been assigned a call number to expedite the location of the book. Each person is responsible for shelving the books and journals they use in the appropriate place. The journals are alphabetized by title and are stacked in numerical order by issue number. Most of the journals we carry are bound once a year, and the bound issues are alphabetized by title, except where space was an issue, and then have been placed in appropriate places in the library. Books or journals are not to be removed from the Departmental Library except for the time it takes to make a copy.

The Health Sciences Library is also available for your use in checking out books. Many of the books and journals in our library are also found in the Health Sciences Library, if there is a need to copy them or check them out.

**PubMed** is free when accessed from a University computer, or if you log in through the University library website.

#### **CHAPTER XIV**

#### DEPARTMENTAL MEETINGS AND CONTINUING EDUCATION COURSES

## A. Program Meetings

Students will attend weekly staff meetings, Mondays at 8:00 or 8:30 AM in the D-751 or other assigned room. Clinic staff will also attend these meetings.

## **B.** Continuing Education Courses

If space is available, students must attend all Continuing Education Courses presented by Prosthodontic Faculty under the University of Washington Continuing Dental Education Program. All students must register with Continuing Dental Education for these courses and may be required to assist CDE in presenting the course.

Graduate students are allowed to attend other Continuing Education Courses at the Dental School. Lecture courses are often without a registration fee but participation courses will require a course fee which may be at a small discount. Permission to attend other courses must be obtained from the Program Director. Again, the student must register with CDE for the course.

Frequently CDE courses outside the University of Washington's Continuing Dental Education program will offer free or discounted registrations to the Graduate Prosthodontic Students. The Director and Program Coordinator will inform you of these opportunities, as well as passing on a list of those who wish to attend on to the organizers.

## **CHAPTER XV**

### **CLINICAL TEACHING**

Each student will teach one quarter in the Pre-Doctoral student clinics during their second year in the program. At the beginning of the year, the Director will assign you to a quarter, and the Pre-Doctoral Clinic Manager will assign you a day and time. You will be trained ahead of time on how to supervise the Pre-Doctoral students, grade, and assist them.

#### **CHAPTER XVI**

#### **OUTCOME ASSESSMENT**

Educational institutions are expected to utilize an outcome assessment mechanism to continually monitor the goals and objectives of their programs. The Graduate Prosthodontic Program evaluates its effectiveness in the following ways, all of which need viable student input in order to make them successful:

- 1. Post-testing: At the end of the program, as a part of the awarding of a degree/certificate, the student is required to retake a lengthy multiple-choice examination (patterned after the American Board of Prosthodontics exam). The student must score a minimum of 70% as a graduation requirement. If the student has taken and passed Section A of the American Board of Prosthodontics exam, this requirement will be waived.
- 2. Exit interview: As a part of program completion, a patient review is made with the Program Director and the Clinic Manager in which all assigned patients are reviewed and decisions made as to their disposition and subsequent follow-up care. As a part of this patient review process, the director and the faculty encourage a frank and open discussion of the program in light of the experiences the student expected from the program and what they actually received. The student will also be required to complete a post residency training outcome assessment. The program coordinator will be the point of contact for this.
- 3. The program also conducts periodic sampling of the actual clinical practice of the graduates on a voluntary basis. A form will be sent to you electronically requesting a description of your practice and comments on those areas in which their education prepared them well and those in which improvements could be made.

The results of these three modalities are used by the faculty to modify the program as the clinical practice of prosthodontics changes.

## **Appendices**

#### **Appendix A: Student Progress**

Students in the Graduate Specialty Program in Prosthodontics are in a program accredited by the Commission on Dental Accreditation (CODA). The Prosthodontics certificate awarded by the School of Dentistry meets the CODA guidelines for a specialty designation, which is a requirement to practice as a specialist in Prosthodontics in Washington State (WAC 246-817-420). CODA requires that the School (through the program director) have the authority, responsibility and privileges necessary to manage the program.

Because the University of Washington's Graduate Specialty Program in Prosthodontics has a research component, students are also considered graduate students enrolled in the University of Washington Graduate School for the purpose of formalizing their research endeavors as part of their specialty training.

Students enrolled in the Graduate Specialty Program in Prosthodontics are expected to meet the following academic standards and requirements:

- 1. Adhere to the Principles of Ethics and Code of Professional Conduct of the School of Dentistry (http://www.dental.washington.edu/education/pdfs/ethics.pdf).
- 2. Maintain an overall GPA of 3.0 and a minimum grade of 2.7 for each course.
- 3. Adhere to the Department of Prosthodontics requirements expressed in this Syllabus;
- Meet ethical and professional standards, as described by the "American Dental Association's Principles of Ethics and Code of Professional Conduct" (http://www.ada.org/prof/prac/law/code/ada\_code.pdf).
- 5. Make satisfactory progress in the curriculum, as determined by one's performance in formal coursework, seminars and clinics.

The Program Director will determine if a student does not comply with any of these standards and requirements and may consult with the faculty in making this determination. Depending on the nature of the noncompliance issue, the student may be placed on probation and will be informed of the terms of the probation. If the student does not satisfactorily complete the probation, the Program Director, after consultation with the faculty, may dismiss the student. In more serious violations, dismissal of a student may occur without the benefit of a probationary period.

The Graduate Prosthodontics Program will use the following procedure for addressing noncompliance issues that may result in actions up to and including dismissal:

- 1. The UW School of Dentistry Associate Dean for Academic Affairs, department chair, and student shall be informed of the suspected violation.
- 2. The department will begin disciplinary proceedings by holding a meeting consisting of departmental faculty and the student, the purpose of which is to review the nature of the purported violation and to allow the student to respond.
- 3. Based upon information obtained at the informal meeting, the department will make a recommendation to the Program Director regarding any action to be taken in response to

- the purported violation. Options include no action, formal warning, probation, or dismissal from the program.
- 4. Upon official notification of the Department's decision, the student will have two weeks to request a formal appeal of the decision. This request should be in the form of a letter to the Dean of the UW School of Dentistry. Upon receipt of this request, the Dean will appoint an appeal board. The Associate Dean for Academic Affairs will chair the appeal board, with additional members appointed from the faculty of the School based on their knowledge and experience in the area of the purported violation. The board may concur with the departmental recommendation or suggest revisions. If the department accepts the appeal board recommendation, and the student does as well, then the matter is concluded. If the department and/or the student does not accept the appeal board recommendation, the matter will be referred to the Dean, who has final authority. The school will make every effort to resolve this issue within one month.

Specialty Students have certain rights and responsibilities under policies set forth by the Graduate School, and are referred to the University of Washington Handbook, Volume 3: The Students, Part III, Chapter 1: The Student Conduct Code, and Part IV, Chapter 1: Academic Grievances Procedures. (http://www.washington.edu/faculty/facsenate/handbook/Volume3.html)

Graduate Specialty students are also advised that CODA will review complaints that relate to compliance of the Program with the accreditation standards. CODA is interested in the sustained quality and continued improvement of dental and dental-related education programs but does not intervene on behalf of individuals or act as a court of appeal for individuals in matters of admission, appointment, promotion or dismissal of faculty, staff or students. A copy of the appropriate accreditation standards and/or CODA's policy and procedure for submission of complaints may be obtained by contacting the CODA at 211 East Chicago Avenue, Chicago, IL 60611-2678 or by 1-800-621-8099 calling extension 4653, or visit the ADA web site http://www.ada.org/prof/ed/accred/complaint.html.

#### **Appendix B: Student Absence:**

- 1. Vacation and days off
  - a. Request for days of are made via the Leave and Absence form found on Share Point. Students are allowed a maximum of 30 days per year. All absences, of any type, must be approved by the program director.
- 2. Absences for religious observances:
  - a. If you wish to be absent for spiritual or religious observances, you must request that absence within the first two weeks of the quarter using the Leave and Absence form. You can contact your course director by email or in person. If it is a clinical absence, please follow the appropriate clinical absence policy.
  - b. We use the dates on the University of Washington calendar of major days of religious significance (see below) in planning the quarter. While many of these

days are not official University holidays, we note days that have been designated non-work days by the religions that celebrate them. We do our best to grant your request for time off for these observances.

- c. You can see the Calendar of University of Washington Holidays, Traditional Observances, and Major Days of Religious Significance at: https://www.washington.edu/students/reg/religcal.html
- d. SOD Administration has guidelines/policies for suspended and limited operations at: https://dental.washington.edu/policies/clinic-policy-manual/limitedoperations/

# **Appendix C: MSD Thesis**

Progress reports are mandated by the committee but must be reported to the program director on an annual basis by the end of the academic year

Resident	Chief Advisor	Program Director
Signatures		
Committee Members.		
Committee Members:		
Chief Advisor:		
Title of Research:		
Resident Name:		
director on an annual basis by the	e end of the academic year	

## **Appendix D: Use of Artificial Intelligence**

# ChatGPT/Artificial Intelligence Conduct Process Reference Guide UW-SOD Community Standards and Student Conduct

Artificial Intelligence (AI) content generators, like ChatGPT, offer both opportunities and challenges in student learning and the adjudication of academic misconduct reports under the WAC. The use of these advanced technologies can potentially violate academic standards outlined in the Student Conduct Code, depending on their application and adherence to the guidelines set forth in the course syllabus or assignment prompt.

Generally, use of ChatGPT is not in itself a violation of the Student Conduct Code. AI is here to stay and will continue to integrate into our school, work, and home life. As such, it is important that the student conduct process helps students develop the skills and instincts needed to navigate a future where new technologies will continue to disrupt higher education and labor. We can expect that a majority of students will use AI to learn and develop into viable hires for future employers. This positioning may need to be communicated to reporters who have opinions on AI that diverge from the reality that students will continue to use newly available technology to learn.

As we venture into this uncharted territory of student learning, the conduct process plays a crucial role in fostering student development around proper AI use. It offers an opportunity to emphasize the acquisition of new skills and instincts necessary for responsible utilization of ChatGPT/AI in the classroom, as well as in future professional settings.

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#### I. Gathering Information

o In order to gather accurate information, it is important to verify with the reporter whether the student in question made any attempts to seek clarification on the guidelines regarding the use of ChatGPT/AI.

- When a report is received, alleging improper use of ChatGPT/AI, it is essential to follow up with the reporter to confirm the existence of established guidelines for the use of ChatGPT/AI. These guidelines can be found in various sources, including:
- Course syllabus: The instructor may have clearly stated expectations and limitations regarding the use of AI technologies in the course.
- Assignment prompt: The instructions for individual assignments may explicitly mention whether the use of AI tools is allowed or prohibited.
- Email correspondence between the instructor and students: Any previous communication exchanged regarding the use of AI technologies should be considered.
- Canvas announcements: Check for any announcements made by the instructor or teaching assistant that provide guidance on the use of AI tools.
- Lecture slides: Instructors sometimes provide specific guidelines during lectures or presentations that should be taken into account.

## II. Determining Permissible Use

- There are different ways to use ChatGPT, some of which may be allowed, while others may violate the Student Conduct Code or class syllabus.
- The key distinction lies in whether ChatGPT was used to assist the student's own writing process, similar to utilizing resources at a writing center, or if content generated by ChatGPT/AI is presented as the student's original work, akin to standard plagiarism from an online source.
- Here are some general examples of proper use:
- Using ChatGPT/AI to aid in research and planning for an assignment, provided that the student appropriately acknowledges and attributes the information generated by the AI.
- Utilizing ChatGPT/AI to enhance comprehension of course material or concepts that the student is struggling with, as long as the student does not submit the AI-generated content as their own work without proper acknowledgment.
- o Conversely, here are some general examples of improper use:
- Asking ChatGPT/AI to write an essay or code and directly copying and pasting the output as the student's own work without any original contribution.
- Requesting ChatGPT/AI to extend the length of an already written essay without proper attribution or acknowledgment.

## III. Characteristics of Improper Use of ChatGPT/AI

- It is important to recognize that the following characteristics can serve as indicators rather than conclusive evidence of improper use.
- It is possible for these characteristics to appear in a student's work even if they did not utilize ChatGPT/AI.
- Therefore, it is crucial to exercise caution and not jump to definitive conclusions based solely on these indicators.
- In cases involving ChatGPT/AI, the presence of multiple characteristics listed below can contribute to establishing a stronger case:
- Unusual or inconsistent writing style: AI-generated content may exhibit a distinct writing style that differs significantly from a student's usual writing patterns.

Look for inconsistencies in language, vocabulary, syntax, or tone that could suggest the involvement of AI technology.

- Advanced or specialized knowledge beyond the student's level: If the submitted work demonstrates a level of understanding or expertise that exceeds what would be expected from the student based on their previous work or academic progress, it could be an indication that AI technology was employed to generate the content.
- Rapid production or completion: AI technology can generate text quickly, so if a student submits a large amount of work within an unreasonably short time frame, it may raise suspicions of AI assistance. Pay attention to the time required for research, planning, and writing compared to the submitted output. Pay attention to timestamps tracking student work in MathLab (for coding), Canvas, and Google Docs.
- Unusual sources or references: If the student includes obscure or uncommon sources or references that are not typically accessible to them, it could suggest that the content was generated or influenced by an AI tool.
- Inconsistencies in content knowledge: If a student includes inaccurate or conflicting information in their work, it may indicate that they relied on AI-generated content without fully comprehending or verifying its accuracy.
- Lack of personal reflection or critical thinking: AI-generated content often lacks personal insight, reflection, or original analysis. If the work lacks evidence of the student's own critical thinking, reasoning, or individual perspective, it may suggest the use of AI technology.
- Sudden improvement in performance: If a student consistently produces low-quality work but suddenly submits a significantly higher-quality assignment without a clear explanation for the improvement, it may raise suspicions of AI assistance.
- Unusual formatting or syntax errors: Some AI systems may introduce unique formatting or syntax errors that differ from typical human errors. Look for any unusual patterns or errors that could indicate AI involvement.
- AI related errors: Inappropriate referencing or citation. Incorrect or inconsistent citation styles. Stylistic elements or formatting patterns associated with ChatGPT/AI output. Repetition of specific phrases, sentences, or ideas.

#### IV. Characteristics of Proper Use of ChatGPT/AI

- It's important to evaluate these characteristics in conjunction with the established guidelines provided by the instructor.
- Proper use of ChatGPT/AI is about leveraging the technology to enhance learning, promote critical thinking and demonstrate academic integrity.
- Conduct officers can consider these characteristics as supportive evidence of the student's responsible and ethical utilization of AI technologies.
- When evaluating a case of potentially improper use of ChatGPT/AI, conduct officers can consider the following characteristics as potential indicators of proper use of ChatGPT/AI:
- Consistency in writing style: When a student consistently maintains their own writing style throughout their work, it suggests that they have used ChatGPT/AI

as a tool for assistance rather than relying on it to generate the entire piece of content.

- Integration of AI-generated content: Proper use of ChatGPT/AI involves incorporating the AI-generated content within the student's work while clearly distinguishing it through appropriate citations or acknowledgments. Look for instances where the student demonstrates an understanding of when and how to attribute AI-generated contributions.
- Application of critical thinking: Proper use of ChatGPT/AI involves the student actively engaging with the AI-generated content and applying their critical thinking skills to evaluate, analyze, and refine the information provided. Look for evidence of the student's own ideas and insights alongside the AI-generated content.
- Use of AI as a research and learning tool: Students who use ChatGPT/AI properly leverage its capabilities for research and learning purposes. They may use AI to gather information, explore alternative perspectives, or gain a deeper understanding of complex topics. Look for indications that the student has effectively utilized AI as a resource to enhance their learning process.
- Ethical adherence to guidelines: Proper use of ChatGPT/AI involves compliance with any guidelines or restrictions set by the instructor. Students should demonstrate an understanding of the boundaries and expectations related to the use of AI tools, as outlined in the course syllabus or assignment instructions. Look for evidence that the student has followed prescribed guidelines.
- Incremental improvement and growth: When students gradually develop their skills, knowledge, and understanding over time, it suggests that they are using ChatGPT/AI as a learning aid rather than relying solely on AI-generated content. Look for evidence of continuous improvement and the student's ability to apply learned concepts.
- Proper attribution of AI assistance: Students who use ChatGPT/AI responsibly attribute any assistance received from the AI system. They acknowledge the AI's contributions and clearly differentiate them from their own original work. Look for appropriate citations or references to the AI system used.

#### V. Specific Examples of Proper Use of ChatGPT/AI

- Example 1: A student uses ChatGPT/AI to brainstorm ideas and generate potential research topics for a term paper. They then use the AI-generated suggestions as a starting point for further exploration and development of their own ideas.
- o Example 2: A student uses ChatGPT/AI to seek clarification on a complex topic discussed in class. They engage in a dialogue with the AI system to gain a better understanding of the concepts, but they do not submit the AI-generated conversation as their own word.
- Example 3: A student uses ChatGPT/AI to assist in proofreading and editing their essay. They run their draft through the AI system to identify grammatical errors, sentence structure improvements, and suggestions for clarity. The student then carefully reviews and incorporates the AI-generated suggestions into their own writing, maintaining their original voice and style.
- Example 4: A student employs ChatGPT/AI as a virtual study partner. They engage in a conversation with the AI system to discuss and explore key concepts, theories, and

- arguments related to their coursework. The student critically evaluates the AI-generated responses, compares them with scholarly sources, and integrates the insights gained into their own understanding of the subject matter.
- o Example 5: A student utilizes ChatGPT/AI to seek guidance and clarification on a specific coding concept or syntax. They ask the AI system questions about the best approach to solve a particular problem or how to implement a specific algorithm. The student carefully studies the AI-generated responses, compares them with relevant programming resources, and then applies the knowledge gained to develop their own solution, ensuring that the final code is their original work.
- o Example 6: A student uses ChatGPT/AI to assist in debugging their code. They provide snippets of their program to the AI system, seeking suggestions for identifying and fixing errors. The student thoroughly analyzes the AI-generated recommendations, tests them against their understanding of the problem, and incorporates the appropriate fixes into their code while maintaining ownership of their overall solution.
- o Example 7: In an animation class, a student engages ChatGPT/AI to explore animation techniques. The AI-generated suggestions inspire the student's creative process, influencing their own animation projects. The student incorporates the AI-generated concepts while maintaining their artistic vision and properly attributes any specific ideas or references obtained from the AI system.

## VI. Specific Examples of Improper Use of ChatGPT/AI

- Example 1: A student asks ChatGPT/AI to write an entire research paper and submits it as their own work, without making any substantial contributions or acknowledging the AI's involvement.
- Example 2: A student requests ChatGPT/AI to generate multiple paragraphs to artificially lengthen an essay they have already written, without providing proper attribution for the AI-generated content.
- Example 3: A student asks ChatGPT/AI to write an entire lab report, including the experimental procedures, data analysis, and conclusions. The student then submits the AI-generated report as their own work, without contributing any original experimentation or acknowledging the AI's involvement.
- Example 4: A student uses ChatGPT/AI to generate an original poem for a creative writing assignment. However, instead of using the AI-generated poem as inspiration or a starting point, they submit it verbatim as their own work without acknowledging the AI's assistance or contribution.
- Example 5: A student requests ChatGPT/AI to solve a series of complex math problems. They input the problems and rely solely on the AI-generated solutions without attempting to understand or work through the problems themselves. The student then submits the solutions as their own work without demonstrating any comprehension of the mathematical concepts involved.
- o Example 6: A student requests ChatGPT/AI to write an entire coding assignment, including the implementation, logic, and comments. They submit the AI-generated code as their own work without making any meaningful contributions or acknowledging the AI's involvement. The student relies entirely on the AI system to produce a solution, essentially presenting it as their own creation.
- o Example 7: A student asks ChatGPT/AI to generate code for a specific task and

copy-pastes the AI-generated code without understanding or modifying it. They submit the code as their own work, without acknowledging the AI's contribution or demonstrating their own coding skills or comprehension of the problem.

## VII. Investigative Tools and Techniques

- o Collaboration with Faculty/Instructor
- To gain a better understanding of the assignment, collaborate with the faculty or instructor.
- Reach out to the reporter for copies of all materials provided to students regarding the assignment, as mentioned in the Gathering Information section of the guide.
- Additionally, gather insights into the student's perspective on the assignment by considering the following:
- a) Attendance requirements: Determine if the class requires regular attendance, as it can provide valuable context for evaluating the student's performance.
- b) Assignment communication: Understand how assignments are communicated to students. This includes the channels used, such as online platforms, emails, or in-person instructions.
- c) Course syllabus: Examine the course syllabus to identify any online learning tools integrated into the curriculum. These tools may have relevance to the student's utilization of ChatGPT/AI.
- d) Behavioral patterns: Review the student's behavior throughout the quarter to identify any consistent patterns that may shed light on their approach to assignments and their potential use of ChatGPT/AI.
- e) Expectations beyond the reported assignment: Clarify expectations set throughout the course that pertain to classroom behavior beyond the specific assignment being investigated. This broader context can provide valuable insights.
- o AI Detection Software
- AI detection software is not relied upon as the sole determinant in academic integrity cases.
- While course instructors may use AI detection software and mention it in the report, CSSC emphasizes to students we meet that such reports are not considered as conclusive evidence when determining preponderance.
- CSSC does not treat AI detection software reports as facts in academic integrity cases.
- Point course instructors to academic articles available via Google Scholar that highlight how unreliable AI detectors currently are and will most likely be in the future.
- Please note, students who use online tools to translate work done in their native language into English are using AI.
- o Case Consult Across Decentralized UW Conduct System
- This is a brave new world and we need to rely on each other!
- We are all trying to figure this out together in real time...
- a) That includes students, faculty, TAs, student advisors, academic

departments and conduct administrators.

- CSSC is eager for a top down statement from university leadership to rely on as a philosophical foundation for adjudicating cases involving AI/ChatGPT.
- This is a great opportunity to consult across the decentralized conduct departments when trying to work through an AI/ChatGPT case.
- As AI develops, there is increased likelihood that additional disruptive technology will impact current higher education learning modalities.
- This includes AI related behavioral cases that center around privacy and harassment
- Case Adjudication
- During the case adjudication process, consider the following steps:
- a) Student accountability: Ideally, the student should take responsibility for any mistakes or shortcuts they may have made. Assess their willingness to acknowledge their actions.
- b) Plausibility of explanations: Evaluate the plausibility of the student's explanation based on the available evidence. Consider the consistency and coherence of their account.
- c) Work and progress tracking: Check if the student used platforms like Google Docs or similar tools that track their work and progress. This can provide insights into their writing process and potential use of ChatGPT/AI.
- d) ChatGPT chat history: If possible, request the student to screen-share and show their ChatGPT chat history. This can help verify their usage of the AI system and clarify their intentions.
- e) Consultation with the instructor: Consult with the instructor to gain further perspectives and insights into the student's explanations. Their input can contribute to the overall assessment of the case.

# **Appendix E: Grade Sheets**

Graduate Prosthodontics					Date:
ResD 580 Seminar					Student:
Therapy Presentation					Evaluator:
PRESENTATION SKILLS					
<b>Documentation:</b>	Excellent	<b>←→</b>	<u>Unsati</u>	isfactor	<u>Comments</u>
Clinical Data	4	3	2	1	
Photographs	4	3	2	1	
Radiographs	4	3	2	1	
Charting	4	3	2	1	
Other Materials (Mounted casts, diagnostic wax-up, set-up, hand	4 louts, etc.)	3	2	1	
Quality (slide presentation, color, font, layout, spelling, e	4 tc.)	3	2	1	
PREPARATION					
Knowledge of:	Excellen	<u>t</u> ←-	→ <u>Uns</u>	atisfact	ory <u>Comments</u>
Diagnosis and Prognosis	4	3	2	1	
Treatment Planning	4	3	2	1	
Treatment Rendered	4	3	2	1	
Treatment Alternatives	4	3	2	1	
Interdisciplinary Considerations	4	3	2	1	
Recognition of Treatment Errors	4	3	2	1	
Recognition of Treatment Errors  Literature to Support Therapy	4	3	2	1	

<u>Case Selection</u> <u>Excellent</u> ← → <u>Unsatisfactory</u> <u>Comments</u>

Addresses Requirements	YES			NO		
Stimulation of Discussion	4	3	2	1		
Additional Comments:						
OVERALL GRADE – On a scale of 4.0	(Excelle	<i>nt</i> ) to	1 ( <i>U</i>	Insatisfact	tory):	
3.7 - 4.0 = A						
3.3 - 3.6 = B 2.8 - 3.2 = C						
2.5 - 5.2 = 0						

99.0 to 100% = 4.0	93.0 to 94.4% = 3.7	87.5 to 89.9% = 3.4	80.0 to 82.4% = 3.1	72.5 to 74.9% = 2.8
96.0 to 98.9% = 3.9	91.5 to 92.9% = 3.6	85.0 to 87.4% = 3.3	77.5 to 79.9% = 3.0	70.0 to 72.4% = 2.7
94.5 to 95.9% = 3.8	90.0 to 91.4% = 3.5	82.5 to 84.9% = 3.2	75.0 to 77.4% = 2.9	Below 70% = 0.0

## **PRESENTATION SKILLS**

2.7 or lower = F

<b>Documentation:</b>	Excellent	$\leftarrow \rightarrow$	<u>Unsat</u>	tisfactory	<u>Comments</u>
Clinical Data	4	3	2	1	
Photographs	4	3	2	1	
Radiographs	4	3	2	1	
Charting	4	3	2	1	
Other Materials	4	3	2	1	
(Mounted casts, diagnostic wax-up, set	t-up, hando	uts, etc	:. )		
Quality  (slide presentation color font layout)	4 snellina et	3	2	1	

(slide presentation, color, font, layout, spelling, etc.)

## **PREPARATION**

Knowledge of:	<u>Excelle</u>	<u>nt</u> ←	→ <u>U</u> r	satisfactory	<u>Comments</u>
Diagnosis and Prognosis	4	3	2	1	
Treatment Planning	4	3	2	1	
Treatment Alternatives	4	3	2	1	
Interdisciplinary Considerations	4	3	2	1	
Literature to Support Therapy	4	3	2	1	
Prognosis to Support Treatment Plans	4	3	2	1	
.0					
Case Selection	Excelle	<u>nt</u> ←	→ <u>Un</u>	satisfactory	Comments
	Excelle YES	<u>nt</u> ←	→ <u>Ur</u>	nsatisfactory NO	Comments
Case Selection		<u>nt</u> ←	<b>→</b> <u>Un</u>	_	
<u>Case Selection</u> Addresses Requirements	YES	_		NO	
Case Selection  Addresses Requirements  Stimulation of Discussion	YES	_		NO	
Case Selection  Addresses Requirements  Stimulation of Discussion	YES	_		NO	

<u>OVERALL GRADE</u> – On a scale of **4.0** (*Excellent*) to **1** (*Unsatisfactory*):

3.7 - 4.0 = A

3.3 - 3.6 = B

2.8 - 3.2 = C

2.7 or lower = F

99.0 to 100% = 4.0	93.0 to 94.4% = 3.7	87.5 to 89.9% = 3.4	80.0 to 82.4% = 3.1	72.5 to 74.9% = 2.8
96.0 to 98.9% = 3.9	91.5 to 92.9% = 3.6	85.0 to 87.4% = 3.3	77.5 to 79.9% = 3.0	70.0 to 72.4% = 2.7
94.5 to 95.9% = 3.8	90.0 to 91.4% = 3.5	82.5 to 84.9% = 3.2	75.0 to 77.4% = 2.9	Below 70% = 0.0

# PLEASE SIGN AND DATE THE FOLLOWING LETTER, AND RETURN IT TO THE PROGRAM COORDINATOR BEFORE JULY 1ST:

I, the undersigned, state that I received this syllabus on my inception to the Graduate Prosthodontics program at the University of Washington, and I recognize that I am responsible for reading the material herein.

I also recognize that should I have any questions on the policies and procedures of the Graduate Prosthodontics Program, that it is my responsibility to ask the Director or Program Coordinator for clarification.

This letter will be retained in your student file in the Graduate Prosthodontics office. The Director or Program Coordinator will be more than happy to clarify any points for you, or to explain any policy which you find to be unclear.

Signed:	Date: