Prosthodontics

Head
• Julie Holloway

Professional certificate: prosthodontics
Faculty: http://www.dentistry.uiowa.edu/prosthodontics-faculty
Web site: http://www.dentistry.uiowa.edu/prosthodontics

Prosthodontics is the dentistry specialty involving crowns, fixed partial dentures (bridges), removable partial dentures, complete dentures, maxillofacial prostheses, and implant prostheses.

D.D.S. Student Training

The Department of Prosthodontics instructs Doctor of Dental Surgery students in the basic principles, practices, and concepts of prosthodontics required for the practice of general dentistry. Students learn through laboratory projects and treatment of patients with differing prosthodontic needs.

Professional Program of Study

• Certificate in Prosthodontics

Students working toward the Certificate in Prosthodontics must pursue the Master of Science or the Doctor of Philosophy in oral science in conjunction with the certificate; see “Graduate Study” below.

Certificate

The Certificate in Prosthodontics requires a minimum of 36 months of study. It prepares individuals for specialty clinical practice in the discipline. The curriculum includes didactic courses and clinical training in all of the disciplines that make up the broad specialty of prosthodontics, including implant prosthodontics, maxillofacial prosthetics, and treatment of temporomandibular disorders. Patient care is completed in close collaboration with the other dental specialties. Clinically related basic science instruction complements the clinical curriculum.

The certificate program is accredited by the Commission on Dental Accreditation of the American Dental Association. Successful completion of the program satisfies the formal training requirement for eligibility to take the American Board of Prosthodontics certification examination.

Admission

Applicants to the prosthodontics certificate program must meet the admission requirements of the Graduate College. They must hold a D.D.S. or a D.M.D. degree from a dental school accredited by the American Dental Association or an equivalent degree.

The certificate program begins around July 1 each year. Applications are accepted year-round; those received by August 15 are considered for admission the following July. A personal interview is required for qualified applicants.

Graduate Study

Students earning the Certificate in Prosthodontics must pursue a Master of Science or a Doctor of Philosophy in oral science while they work toward the certificate. The graduate programs prepare individuals for careers in dental education and research and for independent study and professional growth.

Both graduate programs require more courses in the biomedical sciences and research methodology than the certificate program requires. Students must prepare and defend a thesis (M.S.) or dissertation (Ph.D.) based on original research. Facilities and support personnel for research are available through the college's Dows Institute for Dental Research. See Oral Science in the Catalog.

Facilities

Most didactic, clinical, and laboratory instruction and patient treatment takes place in the Department of Prosthodontics, which is located in the Dental Science Building. The building also houses the Doctor of Dental Surgery (D.D.S.) program, training programs in specialties recognized by the American Dental Association, and the Dows Institute for Dental Research.

The college and the department provide supporting technologies that include cone beam CT radiography, implant imaging software, laboratory CAD/CAM systems, laser surgery, clinical operating microscopes, and digital shade matching.

Advanced prosthodontic students spend time at University of Iowa Hospitals and Clinics, where they work closely with medical professionals in other disciplines to treat medically compromised prosthodontic patients and those who require maxillofacial rehabilitation.

Courses

For D.D.S. Students

PROS:8120 Treatment of Dentulous Patients: Introduction to Occlusion Lecture 1 s.h.
Introduction to principles of occlusion and their clinical application.

PROS:8121 Treatment of Dentulous Patients: Introduction to Occlusion Lab 1 s.h.
Patient simulation exercises demonstrating principles of occlusion.

PROS:8122 Treatment of Dentulous Patients: Fixed Prosthodontics for Single Anterior Teeth Lecture 1 s.h.
Basic principles of fixed prosthodontics for single-unit anterior teeth; basic principles of tooth preparation, clinical steps, and digital procedures for fabrication of anterior single-tooth all-ceramic crowns and interim crowns. Prerequisites: PROS:8120 and PROS:8121.

PROS:8123 Treatment of Dentulous Patients: Fixed Prosthodontics for Single Anterior Teeth Lab 1 s.h.
Patient simulation exercises in single anterior tooth preparation, and fabrication of single-unit anterior all-ceramic and interim restorations. Prerequisites: PROS:8120 and PROS:8121.

Basic biomechanical principles of fixed posterior single tooth prosthodontics; diagnosis and treatment planning for dentate patients including occlusion. Prerequisites: PROS:8120 and PROS:8121 and PROS:8122 and PROS:8123.

PROS:8125 Treatment of Dentulous Patients: Fixed Prosthodontics for Single Posterior Teeth Lab
Patient simulation exercises in single posterior tooth preparation and laboratory fabrication of single-unit posterior definitive and interim restorations. Prerequisites: PROS:8120 and PROS:8121 and PROS:8122 and PROS:8123.

PROS:8240 Treatment of Partially Edentulous Patients: Fixed Multil-Unit Prosthodontics Lecture
Basic biomechanical principles of fixed prosthodontics for multiple-unit fixed prostheses; diagnosis and treatment planning for partially edentulous patient, including occlusion and esthetic concerns.

PROS:8241 Treatment of Partially Edentulous Patients: Fixed Multi-Unit Prosthodontics Patient Simulation I
Patient simulation exercises in preparation and fabrication of a three-unit fixed partial dental prosthesis and interim restoration.

PROS:8242 Treatment of Partially Edentulous Patients: Single Tooth Implant Lecture
Principles, clinical steps, materials, and laboratory procedures necessary for single tooth fixed implant treatment. Prerequisites: PROS:8240 and PROS:8241.

PROS:8243 Treatment of Partially Edentulous Patients: Single Tooth Implant Patient Simulation
Clinical steps in laboratory procedures for single tooth implant surgical guide fabrication and restoration. Prerequisites: PROS:8240 and PROS:8241.

PROS:8244 Treatment of Partially Edentulous Patients: Removable Partial Prosthodontics Lecture
Basic biomechanical principles of tooth replacement with removable partial prostheses; diagnosis and treatment planning for partially edentulous patients. Prerequisites: PROS:8240 and PROS:8241 and PROS:8242 and PROS:8243.

PROS:8245 Treatment of Partially Edentulous Patients: Removable Partial Prosthodontics Patient Simulation
Laboratory exercises in basic principles, clinical steps, and laboratory procedures necessary for fabrication of removable partial dentures. Prerequisites: PROS:8240 and PROS:8241 and PROS:8242 and PROS:8243.

PROS:8246 Treatment of Edentulous Patients: Removable Complete Prosthodontics Lecture
Fundamental principles of diagnosis and treatment planning for edentulous patients, surgical and prosthodontic protocols for oral rehabilitation of edentulism.

PROS:8247 Treatment of Edentulous Patients: Removable Complete Prosthodontics Patient Simulation
Laboratory exercises in basic principles, clinical steps, and laboratory procedures necessary for fabrication of complete dentures, including implant over-dentures. Prerequisites: PROS:8240 and PROS:8241 and PROS:8242 and PROS:8243 and PROS:8244 and PROS:8245.

PROS:8250 Clinical Readiness in Prosthodontics

PROS:8360 Prosthodontic Clinic
Experience supplemented by individual supervision, demonstration.

PROS:8365 Prosthodontic Seminar
Knowledge in biological, basic sciences and technique applied to clinical fixed and removable prosthodontics procedures.

Certificate Courses
Courses offered by the graduate programs in oral science are listed in the Oral Science section of the Catalog.

PROS:5700 Advanced Clinical Prosthodontics 0,2 s.h.
PROS:5710 Advanced Removable Prosthodontic Technique 0,2 s.h.
PROS:5720 Advanced Instrument Technique 0,2 s.h.
PROS:5730 Advanced Implant Techniques 0-2 s.h.
PROS:5740 Advanced Fixed Prosthodontics Technique 0,2 s.h.
PROS:5750 Clinical Issues and Treatment Planning in Prosthodontics 0-1 s.h.

PROS:6220 Fixed Prosthodontics Literature Review I
Fixed prosthodontic procedures; assigned readings, discussion of related research.

PROS:6221 Fixed Prosthodontics Literature Review II
Porcelain-fused-to-metal and ceramic restorations, color science and esthetics; assigned readings, discussion of related research.

PROS:6222 Implant Literature Review 0-4 s.h.
Implant prosthodontics; assigned readings, discussion of related research.
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>PROS:6223</td>
<td>Occlusion Seminar</td>
<td>0-4 s.h.</td>
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<td>Occlusion and the temporomandibular system; assigned readings and discussion of related research.</td>
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<tr>
<td>PROS:6224</td>
<td>Graduate Restorative Materials</td>
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<td>Dental materials science; mechanical, physical, and chemical properties of restorative materials; selection and manipulation.</td>
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<td>PROS:6225</td>
<td>Complete Denture Literature Review</td>
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<td>Complete denture prosthodontics; assigned readings, discussion of related research.</td>
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<tr>
<td>PROS:6226</td>
<td>RPD Literature Review</td>
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<td>Removable partial denture prosthodontics; assigned readings, discussion of related research.</td>
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<td>PROS:6700</td>
<td>Maxillofacial Prosthodontics Seminar</td>
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<td>PROS:7700</td>
<td>Maxillofacial Prosthodontics Rotation</td>
<td>0-1 s.h.</td>
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