Prosthodontics

Interim Head
  • Michael J. Kanellis

Professional certificate: prosthodontics
Faculty: https://www.dentistry.uiowa.edu/prosthodontics-faculty
Website: https://www.dentistry.uiowa.edu/prosthodontics

Prosthodontics is the dentistry specialty involving restoring or replacing teeth using crowns, fixed partial dentures (bridges), removable partial dentures, complete dentures, maxillofacial prostheses, and dental implants.

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.

Programs

Professional Program of Study
Certificate
  • Certificate in Prosthodontics

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 Iowa Institute for Oral Health Research.

The college and the department provide supporting technologies that include cone beam CT radiography, implant imaging software, laboratory CAD/CAM (computer-aided design and computer-aided manufacturing) systems, and dental lasers.

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

Courses

Prosthodontics Courses

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 0-4 s.h.
Fixed prosthodontic procedures; assigned readings, discussion of related research.
PROS:6221 Fixed Prosthodontics Literature Review II 0-4 s.h.
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.
PROS:6223 Occlusion Seminar 0-4 s.h.
Occlusion and the temporomandibular system; assigned readings and discussion of related research.
PROS:6224 Graduate Restorative Materials 0,2 s.h.
Dental materials science; mechanical, physical, and chemical properties of restorative materials; selection and manipulation.
PROS:6225 Complete Denture Literature Review 0-4 s.h.
Complete denture prosthodontics; assigned readings, discussion of related research.
PROS:6226 RPD Literature Review 0-4 s.h.
Removable partial denture prosthodontics; assigned readings, discussion of related research.
PROS:6700 Maxillofacial Prosthodontics Seminar 0-1 s.h.
PROS:6710 Dental Implant Surgery for Prosthodontic Residents arr.
Lecture and literature review covering implant surgery and complications for prosthodontics residents.
PROS:7700 Maxillofacial Prosthodontics Rotation 0-1 s.h.
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 biomechanical principles of fixed posterior single tooth prosthodontics; diagnosis and treatment planning for dentate patients including occlusion. 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 crowns and interim crowns. Prerequisites: PROS:8120 and PROS:8121.

Dental Implant Surgery for Prosthodontic Residents

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.
<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>PROS:8240</td>
<td>Treatment of Partially Edentulous Patients: Fixed Multi-Unit Prosthodontics Lecture</td>
<td>1 s.h.</td>
<td>Basic biomechanical principles of fixed prosthodontics for multiple-unit fixed prostheses; diagnosis and treatment planning for partially edentulous patient, including occlusion and esthetic concerns. 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.</td>
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<tr>
<td>PROS:8244</td>
<td>Treatment of Partially Edentulous Patients: Removable Partial Prosthodontics Lecture</td>
<td>1 s.h.</td>
<td>Basic biomechanical principles of tooth replacement with removable partial prosthodontics; diagnosis and treatment planning for partially edentulous patients. Prerequisites: PROS:8240 and PROS:8241 and PROS:8242 and PROS:8243.</td>
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<tr>
<td>PROS:8245</td>
<td>Treatment of Partially Edentulous Patients: Removable Partial Prosthodontics Patient Simulation</td>
<td>1 s.h.</td>
<td>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.</td>
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<tr>
<td>PROS:8247</td>
<td>Treatment of Edentulous Patients: Removable Complete Prosthodontics Patient Simulation</td>
<td>1 s.h.</td>
<td>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.</td>
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<tr>
<td>PROS:8366</td>
<td>Prosthodontic Seminar II</td>
<td>1 s.h.</td>
<td>Application of knowledge in biological, basic sciences, and technique to clinical fixed and removable prosthodontics procedures.</td>
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<td>PROS:8369</td>
<td>Introduction to Clinical Prosthodontics</td>
<td>4 s.h.</td>
<td>Introduction to application of knowledge in principal, biological, basic sciences, and techniques to clinical fixed, removable, and implant prosthodontics procedures; clinical prosthodontics experience supplemented by individual supervision, demonstration.</td>
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<tr>
<td>PROS:8370</td>
<td>Introduction to Clinical Prosthodontics</td>
<td>8 s.h.</td>
<td>Application of knowledge in principal, biological, basic sciences, and techniques to clinical fixed, removable, and implant prosthodontics procedures; clinical prosthodontics experience supplemented by individual supervision, demonstration.</td>
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<tr>
<td>PROS:8360</td>
<td>Prosthodontic Clinic</td>
<td>arr.</td>
<td>Experience supplemented by individual supervision, demonstration.</td>
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<tr>
<td>PROS:8365</td>
<td>Prosthodontic Seminar I</td>
<td>1 s.h.</td>
<td>Application of knowledge in biological, basic sciences, and technique to clinical fixed and removable prosthodontics procedures.</td>
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