Orthodontics

Head
• Thomas E. Southard

Professional certificate: orthodontics
Graduate degree: M.S. in orthodontics
Faculty: https://www.dentistry.uiowa.edu/orthodontics-faculty
Website: https://www.dentistry.uiowa.edu/orthodontics

The Department of Orthodontics educates predoctoral, professional, and graduate students for careers as practicing dentists, orthodontists, researchers, and teachers. It delivers state-of-the-art treatment to its patients—adults, children, and adolescents with a range of orthodontic, craniofacial, and related issues. The department also conducts major research programs and receives significant funding from the National Institutes of Health (NIH).

The goal of the graduate program in orthodontics is to educate competent individuals to initially practice orthodontics and dentofacial orthopedics. Additional goals include providing clinical services for citizens of Iowa and educating students in methods of scientific inquiry. The programs' objectives are to provide students with an in-depth education in biological and biomechanical principles related to orthodontics; to teach students to diagnose, plan, and deliver comprehensive orthodontic health care service; and to develop students' research and service skills.

Opportunities are available for research and independent study in the department, and there are special facilities for research in biomechanics and craniofacial growth. Interaction with other departments provides learning and research opportunities in surgical orthodontics, cleft lip and palate treatment, speech pathology, animal experimentation, and human growth.

D.D.S. Student Training

The Department of Orthodontics prepares Doctor of Dental Surgery students to competently recognize malocclusions of teeth in preparation for decision making regarding treatment or referral. The lecture course guides D.D.S. students in learning concepts of dental development and facial growth to maturity, as well as treatment-oriented subject matter ranging from limited, interceptive treatment through possible comprehensive treatment options. In a laboratory course, case-based material is utilized to give students experience with evaluating diagnostic casts, radiographs, and clinical findings for space management decision-making purposes. Experience also is included in the basics of fabricating a limited range of orthodontic appliances.

Programs

Professional Program of Study
Certificate
• Certificate in Orthodontics

Graduate Program of Study
Major
• Master of Science in Orthodontics

Courses

Orthodontics Courses
ORDN:5200 Control Theory and Craniofacial Morphogenetic Systems 0-1 s.h.
ORDN:5201 Orthodontic Theory: Diagnosis and Treatment Plan 0-2 s.h.
ORDN:5202 Diagnosis and Treatment Planning 0,2 s.h.
ORDN:5203 Advanced Orthodontic Technique 0-3 s.h.
ORDN:5204 Biomechanics 0-3 s.h.
ORDN:5205 Facial Growth 0-2 s.h.
ORDN:5206 Biomechanical Design 0-3 s.h.
ORDN:5207 Case Analysis 0-3 s.h.
ORDN:5208 Orthodontic Treatment Plan 0-1 s.h.
ORDN:5209 Orthodontic Practicum 0-3 s.h.
ORDN:5210 Orthodontic Seminar 0-3 s.h.
ORDN:5211 Problems: Orthodontics 0-3 s.h.
ORDN:5212 Research: Orthodontics 0-3 s.h.
ORDN:5213 Orthodontic Literature Review 0-3 s.h.
ORDN:5214 Research Seminar 0-3 s.h.
ORDN:5215 Orthodontic Journal Club 0-3 s.h.
ORDN:5216 Practice Management 0-3 s.h.
ORDN:5217 Cephalometrics 0-3 s.h.
ORDN:5218 Orthodontic Anomalies 0-3 s.h.
ORDN:5220 Craniofacial Anatomy 0-3 s.h.
ORDN:5221 Surgical Orthodontic Seminar 0-1 s.h.
ORDN:5400 Dental Treatment of Maxillofacial Deformities 0,2 s.h.
ORDN:5500 Orthodontics Clinic 0-1 s.h.
ORDN:5700 Orthodontics Clinic 0-1 s.h.
ORDN:6201 Oral Anatomy and Physiology 0-3 s.h.
ORDN:6211 Problems: Orthodontics 0-3 s.h.
ORDN:6212 Research: Orthodontics 0-3 s.h.
ORDN:6213 Orthodontic Literature Review 0-3 s.h.
ORDN:6214 Research Seminar 0-3 s.h.
ORDN:6215 Orthodontic Journal Club 0-3 s.h.
ORDN:6216 Practice Management 0-3 s.h.
ORDN:8215 Growth and Development 1 s.h.

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ORDN:5204 Biomechanics 0-3 s.h.
ORDN:5205 Facial Growth 0-2 s.h.
ORDN:5206 Biomechanical Design 0-3 s.h.
ORDN:5207 Case Analysis 0-3 s.h.
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ORDN:6216 Practice Management 0-3 s.h.
ORDN:8215 Growth and Development 1 s.h.
ORDN:8235 Orthodontic Laboratory 1 s.h.
Limited care case diagnosis and treatment.

ORDN:8236 Orthodontic Treatment 1 s.h.
From patient management to use of appliances for correcting some malocclusions in the general practitioner's office.