

## ORT

## Orthodontics

### **ORT 610 CRANIO-FACIAL FORM. (2)**

This is a two credit-hour seminar course that introduces students to the basic concepts and principles of cephalometrics in orthodontic diagnosis and treatment. The course reviews historical literature as well as contemporary articles. Prereq: Admission to graduate dental programs; D.D.S. or D.M.D. degree.

### **ORT 620 ORAL-PHARYNGEAL FUNCTION, PART I. (2)**

Basic and applied physiology for graduate students in dentistry. Class, two and one-half hours. Prereq: Admission to a graduate program of the College of Dentistry; D.D.S. or D.M.D. degree.

### **ORT 621 ORAL-PHARYNGEAL FUNCTION, PART II. (2)**

A continuation of ORT 620, emphasizing speech physiology and language development. Lecture, two and one-half hours. Prereq: Admission to a graduate program of the College of Dentistry; D.D.S. or D.M.D. degree.

### **ORT 660 ORTHODONTIC DIAGNOSIS. (2)**

This is a two credit-hour seminar course offered at the graduate level within the specialty program in orthodontics. The course provides in-depth information concerning methods and rationale for gathering a comprehensive database for orthodontic patients. Analysis and interpretation of the database is approached by using the orthogonal analysis technique. The process of developing a treatment plan from the database will be thoroughly explored. Prereq: Admission to a postdoctoral program of the College of Dentistry.

### **ORT 661 ORTHODONTIC SEMINAR-CLINIC. (3)**

Seminar, laboratory and clinical instruction in orthodontic theory and practice. Lecture, three hours; laboratory, 15 hours. May be repeated to a maximum of 12 credits. Prereq: ORT 660.

### **ORT 662 ORTHODONTIC TECHNIQUE. (2)**

This is a two credit-hour graduate level course designed to introduce or reacquaint the student with some of the most commonly used techniques in orthodontic practice. It is closely related to the diagnosis and treatment planning course and to the course on mechanics. Prereq: Admission to a postdoctoral program of the College of Dentistry.

### **ORT 664 BIOMECHANICS. (2)**

This is a two-credit-hour seminar course. The purpose of the course is to introduce the foundational concepts for understanding both the laws of mechanics and the typical tissues responses to force systems used in orthodontic appliances. Students will learn theory-guided approaches to planning safe, predictable and efficient orthodontic treatment. Students will be expected to read and critique material in assigned textbooks and journal articles for seminar discussions. This course will supplement subject matter covered in the typodont course, ORT 662. Prereq: Admission to a postdoctoral program in the College of Dentistry.

### **ORT 710 MANAGEMENT OF COMPLEX OROFACIAL DEFORMITIES. (1)**

Seminar discussions of techniques in orthodontic problem solving and planning treatment for patients with orofacial deformities refractory to either orthodontic therapy or oral surgery but which are resolvable by utilizing combinations of orthodontic and oral surgical therapies. Lecture, one hour per week; laboratory, one hour per week. Prereq: ORT 660 or permission of instructor.

### **ORT 748 MASTER'S THESIS RESEARCH. (0)**

Half-time to full-time work on thesis. May be repeated to a maximum of six semesters. Prereq: All course work toward the degree must be completed.

### **ORT 768 RESIDENCE CREDIT FOR MASTER'S DEGREE. (1-6)**

Maximum of nine weeks residence credit. Prereq: Admission to the orthodontic graduate program of the College of Dentistry or consent of instructor.

### **ORT 770 ORTHODONTIC SEMINAR. (1)**

Seminar in orthodontic theory and practice for advanced graduate and postdoctoral students in orthodontics. May be repeated to a maximum of six credits. Lecture, three hours. Prereq: Admission to the Orthodontics Graduate Program and consent of course director.

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**ORT 790 RESEARCH IN ORTHODONTICS.**

**(1-5)**

Research in orthodontics. May be repeated to a maximum of five credits. Prereq: Admission to the orthodontic graduate program of the College of Dentistry; special permission.

**ORT 822 ORTHODONTICS.**

**(3)**

This is a lecture and laboratory course in which the knowledge and skills needed to conduct a thorough orthodontic diagnosis and to plan orthodontic therapy are developed. In addition, the principles of orthodontic mechanotherapy are introduced and the role the general dentist plays in maintaining healthy occlusion is defined. Early lectures are oriented to data base collection, analysis and interpretation. The course provides opportunity to develop skills in analysis of facial proportions, analysis of diagnostic dental casts, cephalometric tracings, formulating a prioritized problem list, and development of long term and short term treatment goals. As the semester progresses, focus shifts to give the student a basic understanding of the skills required to fabricate fixed and removable appliances that are typically indicated for limited tooth movement and retention in interceptive orthodontics and adjunctive orthodontic treatment in a general practice setting. The role of the general dentist in the management of their patients' orthodontic needs will be delineated. Special emphasis will be placed on coordination of treatment between the specialist and general practitioner and maintenance of occlusion over the life span of the patient. The role of orthodontic treatment in a multidisciplinary approach will be discussed. Finally, new technology emerging on the horizon in clinical orthodontics will be explored. Prereq: Students must have second year standing in the College of Dentistry and have passed CDS 812. Otherwise, special permission of the course director is required.

**ORT 841 CLINICAL ORTHODONTICS.**

**(1)**

This clinical course requires the students to analyze and diagnose the present and developing occlusal disharmonies in their assigned patients and to provide therapy for those patients who need tooth movements judged to be within the scope of the general practice of dentistry. Prereq: ORT 822 and consent of course director.

**ORT 850 ORTHODONTIC ELECTIVE.**

**(1-10)**

Elective courses offered by the Department of Orthodontics provide opportunities for further study of or experience in various aspects of orthodontics. Topics may include principles of comprehensive orthodontic treatment, types of orthodontic appliances, and methods of correcting facial skeletal problems. Prereq: Minimum year in dental school and any course prerequisites will be announced for each topic.