

ORTHODONTICS (ORTH)

ORTH 5502. Principles And Practice Of Orthodontics. 2 Credit Hours.

Trace the history of orthodontics, its early development as an art and science. The basic problems associated with the establishment of orthodontic diagnosis, various theories of etiology of malocclusion, early treatment vs. late treatment, various treatment mechanics and their critical evaluation.

Course Type: Discussion

ORTH 5522. Developmental And Educational Psychology In Orthodontics. 2 Credit Hours.

The study and application of pertinent concepts and principles in developmental and educational psychology, concentrating in behavior modification, stage theory, cognitive theory and contemporary approaches to patient care as observed from infancy through adolescence in particular but with a "life span" orientation for all aged patients seeking orthodontic care.

Course Type: Lecture

ORTH 5531. Orthodontic Techniques. 1 Credit Hour.

Comprehensive laboratory skills in wire bending, soldering, model trimming and manipulation of self-curing resins will be demonstrated. The student will perform various exercises to acquire the required skills.

Course Type: Lecture

ORTH 5532. Orthodontic Mgt Of Patients W/Cleft Lip/Palate/Other Anomalies. 2 Credit Hours.

Prerequisites: None Deals with diagnosis and treatment of patients with cleft lip and palate and other craniofacial anomalies. These anomalies have a strong impact on the development of teeth, dental occlusion and harmony in the craniofacial complex. The course will relate to the management of these various problems and the multidisciplinary approach required to achieve optimum esthetic and functional results. This course is given over a year period of time, but the student receives credit for it in the second semester of the course. Year long course.

Course Type: Clinical

ORTH 5541. Materials Science For The Dental Specialties. 1 Credit Hour.

Properties and structures of various cements, metals and alloys used in clinical orthodontics.

Course Type: Lecture

ORTH 5551. Advanced Orthodontic Techniques. 1 Credit Hour.

The more advanced techniques of patient banding and treatment of malocclusion will be demonstrated. The student will perform these skills utilizing a typodont in preparation for treatment of patients.

Course Type: Clinical

ORTH 5561. Articulation And Occlusion. 1 Credit Hour.

Prerequisites: None Provides a basic understanding and philosophy in the subject of occlusion and the physiology of the stomatognathic system. It includes the etiology, diagnosis and treatment of temporomandibular disorders.

Course Type: Lecture

ORTH 5581. Roentgenographic Cephalometry. 1 Credit Hour.

Principles of cephalometric roentgenography. Method of tracing and analyzing the radiographs, calculation and estimation of errors in this radiographic technique. Cephalometric analyses will be discussed.

Course Type: Lecture

ORTH 5701. Craniofacial Growth. 1 Credit Hour.

The mechanisms, principles and regulations of human craniofacial complex and the factors influencing physical growth and development. Methods for evaluating dental, skeletal and other determinants of physiologic age will be integrated with the assessment of growth changes from serial cephalometric radiographs.

Course Type: Lecture

ORTH 5711. Community Research Methods. 1 Credit Hour.

Prerequisites: None The course presents methodological issues important to clinical research of importance are formulation of a research question, methods of analyzing the data, data collection, and submission of a protocol for research. Also to be covered are statistical methods of analyzing for various data to include parametric and non-parametric methods of analysis, frequency data, simple linear regression and correlation. The course is offered during the first years of graduate study for the orthodontic graduate students. We require this course be offered prior to the student's enrollment in ORTH 5980 since it provides fundamental principles of research. One credit hour over 16 weeks is adequate for this.

Course Type: Discussion

ORTH 5731. Preventive Periodontics. 1 Credit Hour.

Factors affecting periodontal health with special emphasis on the role of malocclusions will be studied. Development of occlusal disharmonies and periodontal health. The periodontal pathology in hyper and hypooclusion and methods of promoting oral hygiene and oral health will be discussed. The course will include discussion of orthodontic appliances, adjunctive to periodontal treatment.

Course Type: Discussion

ORTH 5732. Biomechanics & The Biology of Tooth Movement. 2 Credit Hours.

Prerequisites: None Histological and biophysical aspects of orthodontics. Biological mechanical and engineering principles applicable to orthodontic appliances will be discussed.

Course Type: Lecture

ORTH 5741. Advanced Studies In Oral Diagnosis/Oral Medicine. 1 Credit Hour.

Complex multidisciplinary problems in oral diagnosis, role of general factors in relation to dental disease and interaction between the different dental specialties will be discussed. The role of dental radiography in diagnosis and treatment of orthodontic problems with emphasis on radiation hygiene will be discussed.

Course Type: Lecture

ORTH 5761. Etiology, Genetics And Care Of The Exceptional Patient. 1 Credit Hour.

The orthodontist's role in caring for the handicapped child. The course covers assessment of the value of the team approach in caring for handicapped children and recognition of the genetic, medical, dental and psychosocial problems of families with handicapped children.

Course Type: Lecture

ORTH 5771. Graduate Practice Administration. 1 Credit Hour.

Organization of practice, recruitment and selection of auxiliary personnel, orientation and training auxiliary personnel. Planning and decision making concerning a practice and organization and/or planning facility design in selection of equipment.

Course Type: Lecture

ORTH 5801. Advanced Oral Histology And Pathology. 1 Credit Hour.

The objective of this course is to build on the preexisting base of knowledge in the area of pathology, oral pathology and histology. The course will be directed at preparing the student for both clinical application of pathologic data and the use of pathologic data as a research tool. Both preexisting study sets and daily accessioned material in the oral pathology lab will be used in the teaching program.

Course Type: Lecture

ORTH 5940. Clinical Practice. 1-14 Credit Hours.

Prerequisites: None May be repeated; maximum credit 14 hours. The clinical practice utilizes approximately 50% of the graduate orthodontics curriculum time. The student is assigned about 40 patients presenting a variety of malocclusion. Each patient receives a diagnostic work-up and a complete analysis of the problem in a faculty/student conference. The student is encouraged to utilize a range of diagnostic procedures and develop a treatment plan.

Course Type: Clinical

ORTH 5950. Research Methods In Dentistry. 1-4 Credit Hours.

Prerequisites: None. May be repeated with change of subject matter; maximum credit 4 hours. Introduction to research principles and practices on a designed research problem.

Course Type: Independent Study

ORTH 5960. Directed Readings In Dentistry. 1-4 Credit Hours.

May be repeated with change in subject matter; maximum credit four hours. Discussion and reports on assigned readings relative to different divisions in orthodontics.

Course Type: Discussion

ORTH 5970. Research Methods in Dentistry. 1-2 Credit Hours.

Prerequisites: None May be repeated; maximum credit 8 hours. The course presents methodological issues important to clinical research of importance are formulation of a research question, methods of analyzing the data, data collection, and submission of a protocol for research. Also to be covered are statistical methods of analysis for various data to include parametric and non-parametric methods of analysis, frequency data, simple linear regression and correlation.

Course Type: Discussion

ORTH 5980. Research For Master's Thesis. 1-2 Credit Hours.

Prerequisites: None May be repeated; maximum credit 11 hours. The student completes an original individual research project which must be defended successfully as a requirement for the master's degree. It will encompass a critical review of literature, statement of the problem, methods and materials, results and conclusions.

Course Type: Independent Study

ORTH 5990. Special Studies In Dentistry. 1-4 Credit Hours.

Prerequisites: Appropriate basic courses in orthodontics, permission of instructor. May be repeated; maximum credit 8 hours. Qualified students may work independently on topics of special interest. Individualized discussions, guided readings and laboratory included.

Course Type: Independent Study

ORTH 7191. Dentofacial Growth & Development. 1 Credit Hour.

Prerequisites: None May be repeated; maximum credit 2 hours. Introduction to dentofacial growth and development; development of the dentitions and speech; dentofacial development of patients with cleft lip/cleft palate and introduction to management of patients with cleft lip/cleft palate; introduction to orthodontic cephalometrics; comparisons of dental and chronologic age and maturity indicators.

Course Type: Lecture

ORTH 7225. Developmental Dentistry Orthodontics. 2.5 Credit Hours.

Fundamentals of fabrication of orthodontic appliances, including the various manipulative components plus application of appliances to typodonts for comprehension.

Course Type: Lecture

ORTH 7391. Orthodontic Diagnosis. 1 Credit Hour.

Principles in collection of diagnostic information including dental and health history, clinical and radiographic examinations, orthodontic study models, photographs, and cephalometric and cast evaluations. Analysis of this data base and preparation of a treatment plan using the proper procedures and protocol.

Course Type: Lecture

ORTH 8191. Orthodontics Lectures I. 1 Credit Hour.

Prerequisites: None Basics of etiologic factors, diagnosis and prevention/interception of malocclusions with special attention to primary and mixed dentition periods.

Course Type: Lecture

ORTH 8291. Clinical Orthodontics I. 1 Credit Hour.

Prerequisites: None Applying diagnostic, preventive, and treatment principles to patients in coordination with clinical course in pediatric dentistry.

Course Type: Clinical

ORTH 8391. Orthodontics Lectures II. 1 Credit Hour.

Principles of Orthodontic practice, e.g., biomechanics, anchorage, tissue response, appliance fabrication, and application of appliances to clinical situations.

Course Type: Lecture

ORTH 8491. Clinical Orthodontics II. 1 Credit Hour.

A continuation of 9652 supervision of the developing dentition, observation of developmental changes, and implementation of preventive and interceptive procedures.

Course Type: Clinical

ORTH 8990. Special Studies. 0-6 Credit Hours.

Prerequisites: None Special topics

Course Type: Lecture

ORTH 9105. Clinical Orthodontics IV. 0.5 Credit Hours.

A continuation of 9652, 9654, and 9655, with greater independence expected plus improved clinical judgment; opportunities to review results of treatment.

Course Type: Clinical

ORTH 9205. Clinical Orthodontics V. 0.5 Credit Hours.

A continuation of 9652, 9654, 9655, and 9657. Complete independence and sound clinical judgement are expected; case report based on student's experience with a patient.

Course Type: Clinical

ORTH 9305. Clinical Orthodontics III. 0.5 Credit Hours.

Prerequisite: None A continuation of ORTH 8291 and ORTH 8491. Increasing experience in the diagnosis and treatment of simple orthodontic problems with special attention to adult patients requiring preprosthetic therapy.

Course Type: Clinical