

## DENTAL SPECIAL TOPICS (DENS)

### **DENS 503. Introduction to Behavioral Science in Dentistry. 1 Hour.**

Semester course; 16 didactic hours. 1 credit. Prerequisite: enrollment within a School of Dentistry degree program. Course consists of online lectures, discussion board activities, assigned readings and interactive activities centering on understanding health disparities and access to care issues as they relate to patient-centered care among diverse populations. Graded as pass/fail.

### **DENS 508. Dental Materials I. 1 Hour.**

Yearlong course; 1 lecture hour. 1 credit. This is the first in a series of four courses that provide the scientific foundations for understanding the factors guiding the use of biomaterials in dentistry. The main objectives of this course are to provide the student with knowledge of the general nature and composition of dental materials; the relationship of dental materials with the oral structures; the physical, mechanical, chemical, biological and aesthetic properties of dental materials; and indications for and proper use of dental materials. Special emphasis will be on those materials used in operative dentistry. Graded as CO in the fall semester with a letter grade and credit awarded in spring.

### **DENS 513. Foundations of Effective Interpersonal Skills During Patient Interactions I. 1.5 Hour.**

Semester course; 1.5 lecture hours. 1.5 credits. Enrollment restricted to students in a School of Dentistry degree program. Course consists of online and face-to-face lectures, skill-building activities, student role-plays and a standardized patient assessment. Students will work both individually and in small groups for discussion and role-plays utilizing foundational motivational interviewing techniques. Graded as Pass/Fail.

### **DENS 515. Clinical Skills I. 1 Hour.**

Semester course. 1 credit. Provides didactic information and practice opportunities to familiarize first-year dental students with patient management and selected clinical skills. The course runs concurrently with courses in periodontics and operative dentistry to provide the basis for initial entry into the dental clinic and patient care.

### **DENS 516. Clinical Skills II. 3.5 Hours.**

4 laboratory and 15 clinical hours. 3.5 credits. Prerequisite: DENS 515. The second in a four-part series of courses designed to prepare dental students for entry into the clinical training environment. Students' learning experiences include didactic lectures, clinical practice and observation, and simple patient-based interactions and/or procedures performed while assisting more senior dental students. Enrollment is restricted to admitted dental students.

### **DENS 524. Evidence-based Dentistry and Critical Thinking I. 1 Hour.**

1 credit. The fundamentals of evidence-based dentistry will be taught. Students will gain the ability to identify, retrieve and critically appraise dental literature.

### **DENS 550. Update in Practice Administration. 1 Hour.**

Semester course; 15 seminar hours. 1 credit. Lectures and seminar discussion on the business aspects of contemporary specialty dental practice, with emphasis on entry into practice, associateship contracts, financing arrangements, risk management and employee relations.

### **DENS 580. Biostatistics and Research Design in Dentistry. 2 Hours.**

Semester course; 30 seminar hours. 2 credits. Must be taken for two consecutive semesters. Provides the advanced education student in dentistry an appreciation for the need for and uses of fundamental biostatistical methods in dental applications. Appropriate research designs for answering research questions of importance in dentistry will be examined. An array of biostatistical methods that are commonly used in the dental literature and by agencies such as the FDA to evaluate new dental products and methodologies are discussed.

### **DENS 591. Dental Special Topics I. 1-6 Hours.**

Semester course; 1-6 lecture hours. 1-6 credits. May be repeated with different topics for a maximum of 12 credits. Explores specific topics in dentistry.

### **DENS 603. Foundations of Effective Interpersonal Skills During Patient Interactions II. 1 Hour.**

Yearlong course; 1 lecture hour. 1 credit. Prerequisite: DENS 513. The two-semester course consists of online and face-to-face lectures, skill-building activities, student role-plays and a standardized patient assessment (spring). Students will work both individually and in small groups for discussion and role-plays of cases utilizing foundational motivational interviewing techniques. Students receive CO grading in the fall semester and a Pass/Fail grade upon completion.

### **DENS 604. Selective Special Topics in Oral Research I. 0.5 Hours.**

Semester course; 0.5 lecture hours. 0.5 credits. Open to any dental student with a minimum GPA of 3.0 and in good academic standing. This introductory course will introduce students to the basics of research and innovation. Lectures will provide a framework for students to pose a research question, formulate a methodology and conduct experiments. Assignments will introduce students to analyzing and presenting research. Students will also learn the fundamentals of innovation protection. Graded as pass/fail.

### **DENS 605. Selective Special Topics in Oral Research II. 1 Hour.**

Semester course; 1 lecture hour. 1 credit. Prerequisite: DENS 604 or permission of instructor. Enrollment restricted to dental students with a minimum GPA of 3.0 and in good academic standing. Students will be introduced to writing a fellowship proposal. Lectures and workshops will guide students through the process of applying for an AD Williams fellowship. Students will also begin their independent research. Graded as pass/fail.

### **DENS 606. Selective Special Topics in Oral Research III. 0.5-2 Hours.**

Semester course; variable hours (3 research hours per credit). 0.5-2 credits. May be repeated for a maximum total of 16 credits. Prerequisite: DENS 605 or permission of instructor. Enrollment restricted to dental students with a minimum GPA of 3.0 and in good academic standing. Independent study and individual research experiences will be conducted under the guidance of a research mentor. Graded as pass/fail.

### **DENS 608. Dental Materials II. 1 Hour.**

Yearlong course; 1 lecture hour. 1 credit. The second in a series of four courses. These courses provide the scientific foundations for understanding the factors guiding the use of biomaterials in dentistry. The main objectives of this course are to provide the student with knowledge of the general nature and composition of dental materials; the relationship of dental materials with the oral structures; the physical, mechanical, chemical, biological and aesthetic properties of dental materials; and indications for and proper use of dental materials. Special emphasis will be on those materials used in prosthodontic dentistry. Graded as CO in the fall semester with a letter grade and credit awarded in spring.

**DENS 610. Fundamentals of Oral and Maxillofacial Radiology. 2 Hours.**  
Semester course; 2 lecture hours. 2 credits. This course will introduce students to the principles, theory and techniques of diagnostic imaging.

**DENS 611. Introduction to Professionalism, Ethics and Ethical Decision-making. 1 Hour.**

Semester course. 1 credit. Provides a review of the foundation of ethical principles, concepts of professionalism, professional student behavior and responsibilities, ethical issues guiding dentistry, and the development of an ethical decision-making model.

**DENS 619. Evidence-based Dentistry and Critical Thinking II. 1 Hour.**  
1 credit. The fundamentals of evidence-based dentistry will be taught. Students will gain the ability to identify, retrieve and critically appraise dental literature.

**DENS 621. Dental Occlusion. 1 Hour.**

Semester course; 1 lecture hour. 1 credit. Consists of lectures which expand on the basic concepts that were presented in the fundamentals of occlusion course. Focuses on the examination, diagnosis and treatment planning of various occlusal problems. The student will learn the skills needed to analyze the dental occlusion of patients and to plan successful occlusal therapy, including restorative procedures and fixed prosthodontics treatment.

**DENS 622. Dental Occlusion Lab. 1 Hour.**

Semester course; 3 laboratory hours. 1 credit. Consists of labs which expand on the basic concepts that were presented in the fundamentals of occlusion course. Focuses on the examination, diagnosis and treatment planning of various occlusal problems. The student will learn the skills needed to analyze the dental occlusion of patients and to plan successful occlusal therapy, including restorative procedures and fixed prosthodontics treatment. Graded as pass/fail.

**DENS 623. Clinical Skills IV. 7 Hours.**

Semester course; lecture and clinic contact hours. 7 credits. Fourth in the clinical skills series, this course is designed to develop students' familiarity with and confidence in the clinical setting prior to beginning clinical care of their own patient pool. Students will have the opportunity to assist more senior students within their practice group and to perform simple operative procedures.

**DENS 625. Clinical Skills III. 5 Hours.**

Semester course; lecture and clinic contact hours. 5 credits. Designed to evaluate the student's ability to perform specific clinical skills and to provide a variety of experiences to prepare for entry to the school's student clinical practice. Case-based, problem-oriented histories will provide the foundation for development of phased treatment plans and a series of mannequin exercises. Students will have simulated and patient-based experiences during assigned rotations in the school's patient care clinics. Experiences are provided to enhance the student's communication skills as an oral health professional functioning as a component of a health care team. Rotations are coordinated with the spring clinical skills IV course.

**DENS 628. Evidence-based Patient Care I. 1 Hour.**

1 credit. Students will learn to apply the fundamentals of evidence-based dentistry to practical application in patient care.

**DENS 630. Orthodontic-Periodontic-AEGD Conference. 0.5 Hours.**

Semester course; 8 seminar hours. 1 credit. Must be taken every semester of the program. Discusses treatment planning and analysis of patients requiring combined orthodontic, periodontic and restorative care. Presents topics of interest to orthodontists, periodontists and general dentists. Graded S/U/F.

**DENS 642. Fundamentals of Treatment Planning. 1 Hour.**

Semester course; 1 lecture hour. 1 credit. Open only to second-year D.D.S. students. Designed to build upon the student's prior exposure to discipline-based treatment planning concepts. Students will develop an integrated, multidisciplinary approach to urgent and oral disease control phase patient treatment planning. The course will also cover the use of information technology applications to document treatment plans and strategies for effectively communicating treatment plans to patients. Graded P/F.

**DENS 651. Preclinical General Practice Dentistry Lab. 5 Hours.**

Semester course; 200 laboratory hours. 5 credits. Admission into VCU International Dentist Program required. Designed to prepare and transition a class of internationally trained dentists into the third year of dental school at VCU. All aspects of preclinical dentistry will be covered in this basic preparatory laboratory course. Graded P/F.

**DENS 652. Preclinical General Practice Dentistry Lecture. 9 Hours.**

Semester course; 144 lecture hours. 9 credits. Admission into VCU International Dentist Program required. Designed to prepare and transition a class of internationally trained dentists into the third year of dental school at VCU. All aspects of preclinical dentistry will be covered in this basic preparatory lecture course. Graded P/F.

**DENS 653. Clinical General Practice Dentistry Lecture. 6 Hours.**

Semester course; 96 lecture hours. 6 credits. Admission into VCU International Dentist Program required. Comprises clinical experiences prior to the third year of professional study. This course is designed to enhance the student's clinical experience in patient management, treatment planning, utilization of dental auxiliaries, consultation with other health care professionals and referral to appropriate dental specialists. Specialty subjects and techniques will be combined to form a general dentistry model for patient care. Guidance from faculty will encourage the student to synthesize and integrate materials, methods and techniques from previous courses into a logical and systematic approach to the delivery of oral health care. Small-group seminars will be provided to enhance the student's transition to dental health care at VCU. Graded P/F.

**DENS 654. Clinical General Practice Dentistry Lab. 5 Hours.**

Semester course; 200 laboratory hours. 5 credits. Enrollment requires admission into the VCU International Dentist Program. Prerequisite: DENS 652. Comprises clinical experiences prior to the third year of professional study. This course is designed to enhance the student's clinical experience in patient management, treatment planning, utilization of dental auxiliaries, consultation with other health care professionals and referral to appropriate dental specialists. Specialty subjects and techniques will be combined to form a general dentistry model for patient care. Guidance from faculty will encourage the student to synthesize and integrate materials, methods and techniques from previous courses into a logical and systematic approach to the delivery of oral health care. Small-group seminars will be provided to enhance the student's transition to dental health care at VCU. Graded pass/fail.

**DENS 655. Preclinical General Practice Dentistry for Internationally Trained Dentists. 6 Hours.**

Yearlong course; 6 lecture hours. 6 credits. Designed to support the integration of a class of internationally trained dentists into the second year at the VCU School of Dentistry, this course addresses special topics of concern for this cohort. The course will cover core didactic material and laboratory activities and will strengthen areas that have been previously identified as opportunities for growth in this student population. Students receive CO grading in the fall and a pass or fail grade and earned credit in the spring.

**DENS 660. Interdisciplinary Care Conference. 0.5 Hours.**

Continuing course; 7 hours. 1 credit. Must be taken every year of the program. Provides a forum for formal presentation and group discussion of the diagnosis, treatment planning, delivery and prognosis of interdisciplinary dental care. Designed for continuing enrollment for two academic semesters; graded CO in the fall and a final grade of Pass or Fail in the spring.

**DENS 691. Dental Special Topics II. 1-6 Hours.**

Semester course; 1-6 lecture hours. 1-6 credits. May be repeated with different topics for a maximum of 12 credits. Explores specific topics in dentistry.

**DENS 699. Thesis Guidance. 1-2 Hours.**

Semester course; 18-36 seminar hours. 1-2 credits. Must be taken every semester of the program. The graduate student selects a research project topic, conducts the necessary background literature review, develops a protocol, obtains the necessary materials, instruments and human/animal use approvals as necessary, collects and analyzes the data, presents the findings in the form of a master's thesis, and prepares a manuscript for publication.

**DENS 700. Basic Sciences and Graduate Dentistry. 3 Hours.**

First year; spring course; 45 hours. 3 credits. Advanced level survey of topic areas related to the principles and practices of dentistry including: oral pathology, biochemistry and physiology, infection and immunity, pharmacology, biomaterials and genetics.

**DENS 701. Remediation in Dentistry. 1-7 Hours.**

Semester course; variable contact hours. Variable credits. This course is not part of the core D.D.S. curriculum. Students who must remediate a course, for any reason, will be enrolled in this course during their remediation period and credit hours will be assigned consistent with the course being remediated. A grade of pass/fail will be assigned at the completion of the remediation period.

**DENS 702. Dental Clinics. 1-12 Hours.**

Semester course; variable hours, clinical contact. 1-12 credits. May be repeated for credits. Restricted to students enrolled in D.D.S. program. This course is designed for students who need to remediate clinical experiences, make up clinical experiences or are off cycle with clinical work for any other reason. Credit hours, learning objectives and exact expectations/responsibilities will be identified in an individualized education plan for each student as determined by the school's deans for clinical education and academic affairs. Graded pass/fail.

**DENS 703. Advanced Interpersonal Communications I. 1 Hour.**

Yearlong course; 1 lecture hour. 1 credit. Enrollment restricted to students in a School of Dentistry degree program. This is a two-semester course which introduces third-year dental students to goal setting/change plans and advanced motivational interviewing techniques. The course consists of online and face-to-face lectures, skill-building activities, student role-plays and a patient assessment (spring). Students receive CO grading in the fall semester and a Pass/Fail grade upon completion.

**DENS 704. Academic Dental Career Exploration Elective. 1 Hour.**

Semester course; 3 laboratory hours. 1 credit. Exact contact hours will vary by student and their self-designed learning plan. Enrollment restricted to students in the D.D.S. program with permission of the course director. This is an elective course for D2, D3 or D4 dental students who are interested in learning more about academic dental teaching and/or research careers. The course matches each student with a faculty mentor who provides insight into the day-to-day life of an educator or researcher. This elective is modeled on the ADEA Academic Dental Careers Fellowship Program. Graded as Pass/Fail.

**DENS 708. Dental Materials III. 0.5 Hours.**

Yearlong course; 0.5 lecture hours. 0.5 credits. The third in a series of four courses. These courses provide the scientific foundations for understanding the factors guiding the use of biomaterials in dentistry. The main objectives of this course are to provide the student with knowledge of 1) the general nature and composition of dental materials; the relationship of dental materials with the oral structures; the physical, mechanical, chemical, biological and aesthetic properties of dental materials; and indications for and proper use of dental materials. Special emphasis will be on applying dental materials knowledge to clinical practice. Student-led seminars will be adopted, wherein students will be divided into groups and a specific topic will be assigned to each group. These kinds of seminars will improve the students in terms of critical-thinking, working in teams and presentation skills. Graded as CO in the fall semester with a letter grade and credit awarded in spring.

**DENS 713. Advanced Interpersonal Communications II. 1 Hour.**

Yearlong course; 1 lecture hour. 1 credit. Enrollment restricted to students in a School of Dentistry degree program. This is a two-semester course for fourth-year dental students to integrate behavioral science content, advanced motivational interviewing techniques and emotional intelligence skills into professional practice. The course consists of online and face-to-face lectures, skill-building activities, student role-plays and a patient assessment (fall). Students receive CO grading in the fall semester and a Pass/Fail grade upon completion.

**DENS 718. Dental Materials IV. 0.5 Hours.**

Yearlong course; 0.5 lecture hours. 0.5 credits. The fourth in a series of four courses. These courses provide the scientific foundations for understanding the factors guiding the use of biomaterials in dentistry. The main objectives of this course are to provide the student with knowledge of the general nature and composition of dental materials; the relationship of dental materials with the oral structures; the physical, mechanical, chemical, biological and aesthetic properties of dental materials; and indications for and proper use of dental materials. Special emphasis will be on applying dental materials knowledge to clinical practice and helping students to make independent decisions on materials choice in clinical dentistry, thus preparing them for life after dental school. Graded as CO in the fall semester with a letter grade and credit awarded in spring.

**DENS 730. Dental Practice Management III. 1 Hour.**

Semester course; 1 lecture hour. 1 credit. The third in a series of four courses required over the duration of the four-year D.D.S. curriculum. The series will prepare the dental graduate for making decisions about the type of practice to pursue, planning to establish or purchase a practice and, ultimately, managing it once in operation. Topics covered are those appropriate to the third-year dental student and may include, but are not limited to, marketing a practice, selecting the right location, ergonomics and managing the dental office.

**DENS 735. Patient Management and Professional Conduct I. 5 Hours.**

Yearlong course; 5 clinical hours. 5 credits. Designed for third-year dental students to understand and practice the concepts of ethical conduct, patient management, risk management and professional responsibility. This course is based upon the application of the VCU School of Dentistry Code of Professional Conduct, the ADA Principles of Ethics and Code of Professional Conduct, and the School of Dentistry's Patient Bill of Rights in the clinical setting and is designed to help the dental student strive to do what is right for their patients, now and into the future. Course graded as CO with no credit for fall semester; letter grade and credit assigned for spring semester.

**DENS 740. Dental Practice Management IV. 1 Hour.**

Semester course; 1 credit. The fourth in a series of four courses required over the duration of the four-year DDS curriculum. The series will prepare the dental graduate for making decisions about the type of practice to pursue, planning to establish or purchase a practice and, ultimately, managing it once in operation. Topics covered are those appropriate to the senior dental student and may include, but are not limited to, writing a business plan and understanding the current economy and its impact on dental practice. Graded as P/F.

**DENS 745. Patient Management and Professional Conduct II. 5 Hours.**

Yearlong course; 5 clinical hours. 5 credits. Designed for fourth-year dental students to understand and practice the concepts of ethical conduct, patient management, risk management and professional responsibility. This course is based upon the application of the VCU School of Dentistry Code of Professional Conduct, the ADA Principles of Ethics and Code of Professional Conduct, and the School of Dentistry's Patient Bill of Rights in the clinical setting and is designed to help the dental student strive to do what is right for their patients, now and into the future. Course graded as CO with no credit for fall semester; letter grade and credit assigned for spring semester.

**DENS 752. Clinical General Practice Dentistry. 14.5 Hours.**

Yearlong course; 7-8 clinic sessions per week. 14.5 credits. Enrollment restricted to fourth-year dental students. Course encompasses all clinical patient care instruction within the School of Dentistry group practices. This course is designed to enhance the student's clinical experience in patient management, treatment planning, utilization of dental auxiliaries, consultation with other health care professionals and referral to appropriate dental specialists.

**DENS 762. Clinical Service-learning. 6 Hours.**

Yearlong course; 50 clinical sessions. 6 credits. A course-based, credit-bearing educational experience in which students participate in an organized service activity that meets community-identified needs. During the course, students are assigned rotations in clinical practice settings in underserved areas. In these settings, students are exposed to patients of varied ethnic, socioeconomic and demographic backgrounds, as well as special patient populations not typically encountered in the School of Dentistry clinics. Students have the opportunity to make oral health care more accessible to marginalized groups while continuing clinical education. Throughout this unique learning experience students are exposed to the benefits of potential practice in public health dentistry. Students will reflect on the service activity to increase understanding and application of course content and to enhance a sense of civic responsibility. Course graded as CO with no credit for fall semester; letter grade and credit assigned for spring semester.

**DENS 770. Community Dental Health/Dental Public Health. 1 Hour.**

Semester course; 1 lecture hour. 1 credit. This course presents a series of seminar sessions for students to gain exposure to public health and advocacy learning experiences. It is designed to effect a fundamental transformation in the approach to the practice of oral health care with the understanding of social determinants of health. Graded as pass/fail.

**DENS 780. Functional Occlusion: From TMJ to Smile Design Selective. 1.5 Hour.**

Yearlong course; 1 lecture and 1 laboratory hour. 1.5 credits. Enrollment restricted to selected D4 dental students and AEGD residents. The course consists of lectures and clinic/laboratory components, which expand on the basic concepts that were presented in core D.D.S. curriculum. Students receive CO grading in the fall and Pass/Fail grade and earned credit in the spring.

**DENS 790. Selective: Applications of 3-D Printing in Dentistry. 1 Hour.**

Yearlong course; 1 lecture and .5 clinic hours. 1 credit. Enrollment is restricted to students admitted to D.D.S. program and selected by course faculty. The course has three components: 1) an online self-learning module on basic principles of 3-D printing and its applications in biological science and health science, as well as principle and workflow for implant-guided surgery, 2) a workshop on implant treatment planning using commercially available software and 3-D printing of models and surgical guide and 3) a patient-based observation experience in implant-guided surgery. The course is designed for students to use the most up-to-date digital technology to diagnose and treat real clinical cases. Students receive CO grading in the fall and pass/fail grade and credit are awarded in spring.

**DENS 791. Dental Special Topics III. 1-6 Hours.**

Semester course; 1-6 lecture hours. 1-6 credits. May be repeated with different topics for a maximum of 12 credits. Explores specific topics in dentistry.