

# DENTAL SPECIAL TOPICS (DENS)

## **DENS 101. Introduction to Dentistry. 1 Hour.**

Semester course; 1 lecture hour (delivered online). 1 credit. This course will introduce students to the profession of dentistry. Dental health practitioners will promote and reinforce dentistry as a career. The course provides didactic information in lectures that familiarize pre-dental students with the practice of dentistry as well as the requirements expected of successful candidates to these programs. Students will hear from general dentists and dental specialists, and develop an application portfolio using customized feedback.

## **DENS 501. Remediation in Dentistry D1. 1-7 Hours.**

Semester course; 1-7 lecture hours. 1-7 credits. Enrollment is restricted to current dental students as directed by the Academic Progress Committee. 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. This course is for remediation of D1 courses. A grade of pass/fail will be assigned at the completion of the remediation period.

## **DENS 503. Introduction to Behavioral Science in Dentistry. 1.5 Hour.**

Semester course; 1.5 lecture hours. 1.5 credits. Enrollment is restricted to students in 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. 2 Hours.**

Semester course; 2 lecture hours. 2 credits. Enrollment is 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.**

Semester course; 2 lecture, 1 laboratory and 2 clinical hours (weekly). 3.5 credits. Prerequisite: DENS 515. Enrollment is restricted to admitted dental students. The second in a two-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.

## **DENS 522. Preclinical Restorative Lecture I. 4 Hours.**

Yearlong course; 4 lecture hours (2 lecture credits each semester). 4 credits. This is the first in a three-course preclinical didactic series on restorative dentistry including operative dentistry and fixed prosthodontics. This two-semester didactic course is paired with a two-semester laboratory course. Information is presented regarding caries as a disease process, and students are presented with the knowledge and develop the skills necessary to treat the disease with noninvasive as well as invasive operative treatment techniques. Extensive didactic instruction and laboratory simulation experience is provided in tooth preparation and restoration. Experience is also provided concerning properties, chemistry and manipulation of the various direct dental restorative materials used to restore teeth to their correct anatomical and functional form. Graded as CO in the fall semester with a letter grade and credit awarded in spring.

## **DENS 523. Preclinical Restorative Lab I. 4.5 Hours.**

Yearlong course; 7 laboratory hours. 4.5 credits. This is the first in a three course pre-clinical laboratory series on restorative dentistry including operative dentistry and fixed prosthodontics. This two-semester course consists of laboratory exercises, including conventional mannequin simulation sessions, and is paired with a two-semester lecture course. Information is presented regarding caries as a disease process, and students are presented with the knowledge and develop the skills necessary to treat the disease with noninvasive as well as invasive operative treatment techniques. Extensive didactic instruction and laboratory simulation experience is provided in tooth preparation and restoration. Experience is also provided concerning properties, chemistry and manipulation of the various direct dental restorative materials used to restore teeth to their correct anatomical and functional form. Graded as CO in the fall semester with a letter grade and credit awarded in spring.

## **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 532. Preclinical Restorative Lecture II. 1.5 Hour.**

Semester course; 1.5 lecture hours. 1.5 credits. This is the second in a three-course preclinical didactic series on restorative dentistry including operative dentistry and fixed prosthodontics. This one-semester didactic course is paired with a one-semester laboratory course. Information is presented regarding caries as a disease process, and students are presented with the knowledge and develop the skills necessary to treat the disease with noninvasive as well as invasive operative treatment techniques. Extensive didactic instruction and laboratory simulation experience is provided in tooth preparation and restoration. Experience is also provided concerning properties, chemistry and manipulation of the various direct dental restorative materials used to restore teeth to their correct anatomical and functional form.

**DENS 533. Preclinical Restorative Lab II. 1.5 Hour.**

Semester course; 4.5 laboratory hours. 1.5 credits. This is the second in a three-course preclinical laboratory series on restorative dentistry including operative dentistry and fixed prosthodontics. This one-semester course consists of laboratory exercises, including conventional mannequin simulation sessions, and is paired with a one-semester lecture course. Information is presented regarding caries as a disease process, and students are presented with the knowledge and develop the skills necessary to treat the disease with noninvasive as well as invasive operative treatment techniques. Extensive didactic instruction and laboratory simulation experience is provided in tooth preparation and restoration. Experience is also provided concerning properties, chemistry and manipulation of the various direct dental restorative materials used to restore teeth to their correct anatomical and functional form.

**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. 1-12 Hours.**

Semester course; 1-12 lecture hours. 1-12 credits. May be repeated with different topics for a maximum of 24 credits. Explores specific topics in dentistry.

**DENS 601. Remediation in Dentistry D2. 1-7 Hours.**

Semester course; 1-7 lecture hours. 1-7 credits. Enrollment is restricted to current dental students as directed by the Academic Progress Committee. 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. This remediation course is for remediation of D2 courses. A grade of pass/fail will be assigned at the completion of the remediation period.

**DENS 603. Foundations of Effective Interpersonal Skills During Patient Interactions II. 2 Hours.**

Yearlong course; 2 lecture hours. 2 credits. 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. Introduction to Oral Research. 0.5 Hours.**

Semester course; .5 lecture hours. .5 credits. Enrollment is restricted to any dental student with a minimum GPA of 3.0 and in good academic standing. This course introduces students to oral research. Students will learn about different types of research and explore their personal research interests. Assignments will introduce students to experimental design and presenting research. Graded as pass/fail.

**DENS 605. Writing an A.D. Williams Research Fellowship. 1 Hour.**

Semester course; 1 lecture hour. 1 credit. Enrollment is 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 A.D. Williams fellowship. Students will also begin their independent research. Graded as pass/fail.

**DENS 606. Oral Research: Independent Study. 0.5-2 Hours.**

Semester course; 1.5-6 research hours. .5-2 credits (3 research hours per credit). May be repeated for a maximum total of 16 credits. Enrollment is 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 607. D2 Clinical Dentistry I. 1 Hour.**

Semester course; 3 clinical hours. 1 credit. This course begins the transition of the second-year dental student to clinical patient care of their family of patients. Students will engage in weekly patient care through chairside assisting of their D3 or D4 vertical buddy. 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 617. D2 Clinical Dentistry II. 2 Hours.**

Semester course; 6 clinical hours. 2 credits. This course continues the transition of the second-year dental student to clinical patient care of their family of patients. Students will engage in weekly patient care through chairside assisting of their D3 or D4 vertical buddy. Graded as pass/fail.

**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. 1.5 Hour.**

Semester course; 4 laboratory hours. 1.5 credits. 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 627. D2 Clinical Dentistry III. 6.5 Hours.**

Semester course; 9 clinic hours. 6.5 credits. This course serves as the start of the clinic-intensive portion of the D.D.S. program. Students will be assigned their own panel of patients for whom they will be responsible for management, diagnosis, treatment planning, clinical care and care coordination for the duration of dental school until graduation. Students will also rotate through specialty area clinics for the care of their own patients and other patients receiving care in the clinics. This is a multidisciplinary course incorporating clinics within each department in the School of Dentistry. Graded as pass/fail.

**DENS 628. Introduction to Dental Public Health. 1 Hour.**

Semester course; 1 lecture hour. 1 credit. This course will introduce dental students to issues related to the role of the dental professional at a local and state level, including dental public health, health equity, health literacy, oral health disparities, the role of publicly funded dental programs and the dental safety net.

**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 632. Preclinical Restorative Lecture III. 1 Hour.**

Semester course; 1 lecture hour. 1 credit. This is the third in a three-course preclinical didactic series on restorative dentistry including operative dentistry and fixed prosthodontics. This one-semester didactic course is paired with a one-semester laboratory course. Extensive didactic instruction and laboratory simulation experience is provided in tooth preparation and restoration. Experience is also provided concerning properties, chemistry and manipulation of the various direct dental restorative materials used to restore teeth to their correct anatomical and functional form.

**DENS 633. Preclinical Restorative Lab III. 1 Hour.**

Semester course; 3 laboratory hours. 1 credit. This is the third in a three-course preclinical laboratory series on restorative dentistry including operative dentistry and fixed prosthodontics. This one-semester course consists of laboratory exercises, including conventional mannequin simulation sessions, and is paired with a one semester-lecture course. Extensive didactic instruction and laboratory simulation experience is provided in tooth preparation and restoration. Experience is also provided concerning properties, chemistry and manipulation of the various direct dental restorative materials used to restore teeth to their correct anatomical and functional form.

**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 662. Advanced Restorative and Digital Dentistry Lecture. 1 Hour.**

Semester course; 1 lecture hour. 1 credit. Extensive didactic instruction and laboratory simulation experience is provided in different restorative techniques with focused education on digital dentistry. Experience is also provided concerning CAD/CAM techniques, CAD/CAM materials, esthetic dentistry and intraoral photography. This course is constructed in a way that simulates dental CE courses and is paired with a laboratory course.

**DENS 663. Advanced Restorative and Digital Dentistry Lab. 1 Hour.**

Semester course; 3 laboratory hours. 1 credit. This course consists of laboratory exercises using conventional mannequin simulation, modern dental materials/equipment and digital dentistry technologies. Extensive laboratory simulation experience is provided in different restorative techniques with focus on digital dentistry. Experience is also provided concerning CAD/CAM techniques, CAD/CAM materials, esthetic dentistry and intraoral photography. The course is constructed in a way that simulates dental CE courses and is paired with a didactic course. Graded as pass/fail.

**DENS 680. Graduate Dental Clinic. 4 Hours.**

Semester course; 12 clinic hours. 4 credits. May be repeated for credit. Enrollment is restricted to students enrolled in the M.S.D. program.

This course provides supervised experiences in advanced clinical skills. Students will enhance their skills in diagnosis and treatment planning, patient communication, professional and ethical care, and collaboration with other health care providers. Sections of the course will address specialty-specific treatments. Graded as pass/fail.

**DENS 691. Dental Special Topics II. 1-12 Hours.**

Semester course; 1-12 lecture hours. 1-12 credits. May be repeated with different topics for a maximum of 24 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 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 705. CAD/CAM Senior Selective. 0.5 Hours.**

Semester course; 0.5 clinic hours. 0.5 credits. Clinic time may be weekly, in block rotation or variable schedule. Students must enroll in this course for two consecutive semesters. This is a selective course with focused education on digital dentistry. Experience is also provided concerning CAD/CAM techniques, CAD/CAM materials and intra-oral photography. This course is constructed in a way that simulates dental CE courses. Graded as Pass/Fail.

**DENS 706. Laser Senior Selective. 0.5 Hours.**

Semester course; 0.5 lecture hour. 0.5 credits. Students must enroll in this course for two consecutive semesters. This elective course is offered to dental students who demonstrate high academic achievement and are interested in expanding their practical knowledge and experience in laser applications in dentistry. The goal of the course is to provide dental students opportunities for the integration and application of theoretical, evidence-based and clinical knowledge to the individual's practice of laser dentistry in a controlled, student-centered environment. This course is aimed to provide additional discipline-specific treatment experiences and expand upon previously learned ethical and patient management skills. The course will enhance the general dentist's knowledge regarding applications of various lasers for dental procedures and to provide hands-on simulation experience in applying techniques and procedures suitable for judicious use in general dental practice. The course consists of didactic components, small-group seminars, model-based simulations and clinical assisting. Upon completion of this course, students will have a scientific and clinical basis for understanding various dental lasers and their applications for dental and surgical procedures. Graded as Pass/Fail.

**DENS 707. Dental Sleep Medicine Senior Selective. 0.5 Hours.**

Semester course; .25 lecture and 0.5 clinical hours. 0.5 credit. Students must enroll in this course for two consecutive semesters. The course provides exposure to the discipline of dental sleep medicine and will introduce students to sleep and how it relates to dental sleep medicine. Students will also be introduced to the treatment of obstructive sleep apnea, including hands-on fabrication of appliances and delivery. This select course will also present side effects to the students, as well as how to manage them and follow-up care for oral appliance therapy for OSA. The goal of this course is to have the students obtain knowledge in the scope of dental sleep medicine and to encourage further training if they want to implement this in future practice. 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 710. Selective in Advanced Interpersonal Skills. 1 Hour.**

Semester course; 0.5 lecture and 0.5 clinic hour. 1 credit. Enrollment is subject to selection criteria and permission of the course director. This is a one-semester elective course which applies the philosophy and skills of prior program course work in an authentic patient setting. The course consists of in-clinic observation and classroom sessions. Students will receive feedback on patient interactions and opportunities to build off of specific patient interactions or behaviors over the course of the semester. Students will work both individually and in small groups for discussion and role-plays of cases utilizing foundational motivational interviewing techniques. Graded as Pass/Fail.

**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 727. D3 Clinical Dentistry. 8 Hours.**

Semester course; 24 clinic hours. 8 credits. Clinic time may be weekly, in block rotation or variable schedule. This course serves as a continuation of the clinic-intensive portion of the D.D.S. degree program. Students will continue to treat their own panel of patients for whom they are responsible for management, diagnosis, treatment planning, clinical care and care coordination for the duration of dental school until graduation. Students will also rotate through clinical specialty area clinics for the care of their own patients and other patients receiving care in the specialty clinics. Off-site clinical experiences also begin during this semester. This is a multidisciplinary course incorporating clinics within each department in the School of Dentistry as well as external clinic rotation sites. Graded as pass/fail.

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

Semester course; 1 lecture hour. 1 credit. This course is part of a series. 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. Graded as Pass/Fail.

**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; pass/fail 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; pass/fail grade and credit assigned for spring semester.

**DENS 752. Clinical General Practice Dentistry. 13 Hours.**

Yearlong course; 19.5 clinic hours. 13 credits. Clinic time may be weekly, in block rotation or variable schedule. Enrollment is 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. Students receive CO grading in the fall and a letter grade and earned credit in the spring.

**DENS 753. D4 Treatment Planning Seminar. 1 Hour.**

Yearlong course; 1 lecture hour. 1 credit. This course is the capstone treatment planning experience within the D.D.S. curriculum. Students will independently develop and apply a five-phase treatment planning approach to a clinical patient while providing sound justification for diagnoses and treatment planning decisions. Active patients of record will serve as clinical case studies. This course renders a CO in the fall semester and a letter grade in spring.

**DENS 762. Clinical Service-learning. 4 Hours.**

Yearlong course; 6 clinic hours. 4 credits. Clinic time may be weekly, in block rotation or variable schedule. 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 763. Clinical Externship. 0.5 Hours.**

Semester course; 1.5 clinic hours. 0.5 credits. May be repeated, but this is an elective course that does not count toward degree requirements. Externships are short-term professional learning experiences. This course is designed to provide externships for motivated students who want to gain professional experience beyond general dental education and determine interest in pursuing a specialty. Externships may include general dentistry or dental specialties in educational, governmental or other clinical settings. Graded as Pass/Fail.

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

Semester course; 1 lecture hour (delivered online). 1 credit. This course uses examples and issues in dentistry and dental public health as a strategy for understanding health policy, the market for dental care and public health program development at the local, state and national levels. 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 781. Predictable Restorative Outcomes With Complex Wear Cases Selective. 1 Hour.**

Semester course; 0.75 lecture and 0.25 laboratory hours. 1 credit. Enrollment is restricted to fourth-year D.D.S. students. The course seeks to prepare motivated dental students with advanced skills in diagnosis, treatment planning and treatment of occlusal disease. The goal of the course is to expand on their pre-doctoral occlusal knowledge. Graded as Pass/Fail.

**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. 1-12 Hours.**

Semester course; 1-12 lecture hours. 1-12 credits. May be repeated with different topics for a maximum of 24 credits. Explores specific topics in dentistry.