

# Critical Thinking

## 2-9 Graduates must be competent in the use of critical thinking and problem-solving, including their use in the comprehensive care of patients, scientific inquiry and research methodology.

**Intent:**

*Throughout the curriculum, the educational program should use teaching and learning methods that support the development of critical thinking and problem solving skills.*

*The University of Florida College of Dentistry in compliance with Standard 2-9.*

<b>Standard 2-9: Critical Thinking</b>	
UFCD Competencies	<p><b>4: Critical Thinking:</b> Apply self-assessment, evidence-based decision making, problem solving skills and biomedical science knowledge in clinical patient care. See <b>Appendix 2-3.5</b> UFCD Competencies for the New Dental Graduate.</p>
Certifying UFCD Courses	<p>Refer to <b>Appendix 2-5.1</b> Competency Reference Manual which lists all courses, and competency assessments including forms. <b>Appendix 2-1.5</b> Course Syllabi Manual contains all course syllabi.</p> <p><i>DEN6001: Introduction to Evidence-Based Dental Practice</i>  <i>DEN8768L: Oral Diagnosis/Medicine &amp; Treatment Planning 3</i>  <i>DEN8828L: Clinical Pediatric Dentistry 4</i>  <i>DEN8837L: Comprehensive Periodontal Treatment 4</i>  <i>DEN8838L: Comprehensive Periodontal Treatment 5</i>  <i>DEN8859L: Clinical Prosthodontics 5</i></p>
UFCD Certifying Examinations	<p><b>Written Competency Examinations</b>  <i>DEN6001: Introduction to Evidence-Based Dental Practice</i>  <i>DEN8828L: Case-based Seminar</i></p> <p><b>Clinical Competency Assessments</b>  <i>DEN8837L: Independent Skills-Based Assessment of Clinical Competency in Phase I Therapy</i>  <i>DEN8838L: Independent Skills-Based Assessment of Clinical Competency in Supportive Periodontal Therapy</i></p> <p><b>Case Presentation Competency</b>  <i>DEN8768L: Case Completion Presentation Board Competency Assessment (Class of 2015)</i> <i>DEN8859L Case Presentation Competency Overall Prosthodontics Competency Examination</i></p>
Narrative	<p>Graduates are competent in the use of critical thinking and problem-solving, including their use in the comprehensive care of patients, scientific inquiry and research methodology.</p> <p>In preparation for this self-study, the college Curriculum Committee in</p>

conjunction with course directors conducted a thorough inventory and review of the critical thinking and problem solving components of the DMD curriculum in order to establish a baseline for comparison going forward. See [Appendix 2-9.1](#) Critical Thinking and EBD Summary.

Analysis of this baseline assessment revealed an established thread related to critical thinking and problem solving throughout the DMD curriculum. It also revealed that while we meet this standard, opportunities to strengthen the critical thinking/problem solving components of the curriculum existed.

To address these gaps, in conjunction with the awarding of the HRSA Faculty Development Grant, we trained faculty, created and implemented an initial iteration of small group case-based learning integrating biomedical sciences and clinical patient care in *DEN5210: Developmental Biology and Psychosocial Issues Over the Lifespan*.

We continue to expand our curricular emphasis on case-based learning to support the integration of the basic sciences and clinical critical reasoning, and problem solving skills using realistic clinical scenarios that demand students to rationalize decisions based on the best available evidence from systematic research. We have implemented three additional case-based learning modules, each with three class sessions in *DEN6432C: Basic Endodontic Therapy* (semester five), *DEN6251: Science and Clinical Management of Dental Pain* (semester four) and *DEN5221: Oral Health Management and Psychosocial Issues* (semester two). A module is to be initiated in summer 2015 in *DEN7413C: Removable Partial Prosthodontics: Principles and Techniques* (semester six). Plans are to develop at least seven additional case-based modules. See [Appendix 2-1.5](#) Course Syllabi Manual.

In addition to broadening the scope of case-based learning opportunities in this curriculum, we also focused on enhancing existing global assessment of student achievement. In *DEN8768L: Oral Diagnosis/Medicine and Treatment Planning 3 Case Completion Presentation Board Competency Assessment*, students presented a completed comprehensive care patient case to a faculty panel. Critical thinking and problem solving are integral parts of this process. This case presentation is one of the competency assessments for patient assessment, diagnosis, comprehensive treatment planning, prognosis and informed consent.

To augment this existing global assessment, beginning with the Class of 2015, the Division of Prosthodontics implemented the Overall Prosthodontics Competency Examination, a global patient care assessment in prosthodontics in the form of a completed case presentation. Students select, document, present and defend a completed clinical case to a faculty panel, including decision-making and problem solving. Students are required to document all clinical treatment procedures including clinical photos for each competency step to create a PowerPoint case presentation.

A listing of courses that utilize and evaluate critical thinking and problem solving can be found in [Appendix 2-9.2](#) Courses with Critical Thinking/Problem Solving Focus.

<p>Formative Experiences</p>	<p><b>First-year curriculum</b>  <i>DEN5210: Developmental Biology and Psychosocial Issues Over the Lifespan.</i> This course uses case-based learning in small groups, a behavioral research paper, and presentation and lectures to introduce developmental biological and psychosocial foundation knowledge across the life span. These modes of instruction require students to analyze problems and apply critical thinking skills to work through the clinical case.</p> <p><b>Second-year curriculum</b>  <i>DEN6001: Introduction to Evidence-Based Dental Practice.</i> This course introduces the critical evaluation of the scientific literature, with learning objectives that include the importance of evidence-based decision making in health care; research methods, such as cross-sectional, cohort, case series, case report, and randomized controlled studies; levels of evidence; types of study most appropriate to answer questions related to therapy/prevention, diagnosis, harm/etiology/causation, and prognosis; and the critical appraisal process, including evaluation tools. Frank application of critical thinking is an integral part of this course. After lectures in small groups, students complete four team assignments and a final evidence-based dentistry presentation. The assignment includes a documented search of the scientific literature including critical appraisal of articles.</p> <p><i>DEN6302C: Introduction to Clinical Diagnosis and Treatment Planning.</i> This course is designed to integrate foundation knowledge with clinical application, improve clinical reasoning skills, and encourage decision-making based on evidence-based principles. The course uses large group participation, small group seminars, and clinical laboratories to develop these skills. Students create problem lists and utilize critical thinking to develop an evidence-based diagnosis paired with an appropriate treatment. Students also interact with simulated patient cases in axiUm to formulate a sequenced treatment plan that incorporates disease control and restoration to optimal oral health.</p> <p><i>DEN6432C: Basic Endodontic Therapy.</i> This course uses small group case-based learning, a series of lectures, and preclinical laboratory exercises to teach the fundamental concepts and clinical techniques to perform endodontic therapy. Students apply critical thinking in the small group case-based experience through self-assessment of knowledge gaps and self-directed learning in lay and peer reviewed literature.</p> <p><b>Third-year curriculum</b>  <i>DEN7413C: Removable Partial Prosthodontics: Principles &amp; Techniques.</i> This preclinical laboratory course is taught in small groups using the team-based learning approach. Removable partial denture design principles, techniques and procedures are introduced. Students learn how to survey, design, treatment plan and perform laboratory procedures related to treatment of a partially edentulous patient using simulated cases. Removable partial denture treatment planning and framework design is challenging and requires the application of critical thinking skills directly relevant to clinical patient care.</p> <p>Students are introduced to the component parts of removable partial dentures</p>
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and then, using critical thinking, apply this knowledge to framework design and treatment planning in small group application exercises. This course is an example of a traditional preclinical course in a challenging subject area in which the classroom has been flipped and the students assume responsibility for their learning.

*DEN7433: Evidence-based Endodontics.* This course includes online lectures, discussion of cases in class, team-based learning and an avatar emergency patient assignment. This is to foster student analysis of diagnostic data, plan a broad scope of endodontic treatment and relate this treatment to other disciplines utilizing an evidence-based approach to facilitate clinical decision making

*DEN7717: Clinical Use of Dental Materials.* In this rotation course, students manipulate six dental materials and must demonstrate critical thinking through an oral examination. Students are responsible for summarizing the evidence of the associated material, its physical properties, clinical characteristics, appropriate material selection and when appropriate, any controversial issues related to the materials.

*DEN7761L: Oral Diagnosis/Medicine and Treatment Planning 1.* In this initial clinical course students assess medical and dental histories, complete examinations including photographs, radiographs, study models and full hard and soft tissue charting on their assigned comprehensive care patients. Students also determine the needs of patients and apply critical thinking in formulating a treatment plan (and alternative treatment plans as necessary).

*DEN7766L: Oral Diagnosis/Medicine and Treatment Planning 2.* In this course, students continue to assess medical and dental histories, and complete examinations including photographs, radiographs, study models and full hard and soft tissue charting on their assigned comprehensive care patients. Students additionally determine the needs of patients and apply critical thinking in formulating a treatment plan (and alternative treatment plans, as necessary).

*DEN7835L: Comprehensive Periodontal Treatment 2.* In this clinical course students build on their examination, diagnosis and treatment planning skills as they apply critical thinking to determine a simple patient's periodontal diagnosis and prognosis.

*DEN7836L: Comprehensive Periodontal Treatment 3.* In this clinical course, students continue to build on their examination, diagnosis and treatment planning skills as they apply critical thinking to determine a more complex patient's periodontal diagnosis and prognosis. This course includes a one week rotation in the graduate periodontics residency program during which students demonstrate critical thinking through their participation in a comprehensive literature review.

*DEN7961L: Clinical Examination I.* This is a written, psychomotor and oral examination in which students must demonstrate mastery of the foundation knowledge and clinical skills appropriate for beginning clinical comprehensive

	<p>patient care. The oral portion of the examination is case-based and students must demonstrate critical thinking as they respond to case scenarios and discuss clinical patient treatment.</p> <p><b>Fourth-year curriculum</b></p> <p><i>DEN8263: Advanced Oral Medicine and Clinical Pharmacology.</i> This is a blended course of online lectures and small case-based seminar groups in which students apply critical thinking to diagnosis and treatment decisions.</p> <p><i>DEN8303: Advanced Radiologic Interpretation.</i> This course has a final case-based examination where students are asked to evaluate collective findings regarding the patients' medical conditions, reporting symptoms and interpretation analysis of the radiographic images.</p> <p><i>DEN8352: Advanced Differential Diagnosis.</i> The two written examinations in this course also require students to apply critical thinking.</p> <p><i>DEN8719C: Selection of Clinical Dental Materials.</i> Students must demonstrate critical thinking in this course in their selection of clinical dental materials.</p> <p><i>DEN8827L: Clinical Pediatric Dentistry 3.</i> In the case-based seminar, students read, discuss and critically evaluate articles from the pediatric dental literature restorative materials and techniques.</p> <p><i>DEN8837L: Comprehensive Periodontal Treatment 4.</i> Students complete post treatment Phase 1 evaluations for their patients using critical thinking to apply concepts learned in other portions of the curriculum to assess patient response to initial therapy and determine the need for additional periodontal treatment.</p>
Summative Experience	<p><b>Second-year curriculum</b></p> <p><i>DEN6001: Introduction to Evidence-Based Dental Practice.</i> The final written examination in this course is one of the certifications of competency in critical thinking.</p> <p><b>Fourth-year curriculum</b></p> <p><i>DEN8768L: Oral Diagnosis/Medicine and Treatment Planning 3.</i> In this course, students present a completed comprehensive care patient case to a faculty panel. Critical thinking and problem solving are integral parts of this process. This Case Completion Presentation Board Competency Assessment is one of the competency assessments for critical thinking.</p> <p><i>DEN8828L: Clinical Pediatric Dentistry 4.</i> In the case-based seminar, students read and discuss articles from the literature regarding dental emergencies in pediatric dentistry. The written examination is a competency assessment for critical thinking.</p> <p><i>DEN8837L: Comprehensive Periodontal Treatment 4.</i> Students complete post treatment Phase 1 evaluations for their patients using critical thinking to apply concepts learned in other portions of the curriculum to assess patient</p>

	<p>response to initial therapy and plan for the next treatment stages. This clinical competency assessment is one of the competency assessments for critical thinking.</p> <p><i>DEN8838L: Comprehensive Periodontal Treatment 5.</i> Senior students may challenge the Supportive Periodontal Therapy (SPT) competency assessment once they have completed a minimum of three SPT patient case treatments. This clinical SPT competency is one of the competency assessments for critical thinking, since students are required to identify the need for additional dental treatment or appropriate preventive care.</p> <p>(Class of 2015) <i>DEN8859L: Clinical Prosthodontics 5.</i> Overall Prosthodontics Competency Examination-case presentation. Students must select, document and complete treatment of two clinical patients following the guidelines for this competency. One case is presented before a faculty panel. Student prosthodontic clinical care is evaluated using the rubric and criteria included in the syllabus. This same case presentation is also included in <i>DEN8768L: Oral Diagnosis/Medicine &amp; Treatment Planning 3, Case Completion Presentation Board Competency assessment.</i> Different aspects of student clinical patient care are assessed in these two competency assessments.</p>
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**Documentation submitted with the self-study**

- Appendix 2-3.5      UFCD Competencies for the New Dental Graduate
- Appendix 2-5.1      Competency Reference Manual
- Appendix 2-1.5      Course Syllabi Manual
- Appendix 2-9.1      Critical Thinking and EBD Summary
- Appendix 2-9.2      Courses with Critical Thinking/Problem Solving Focus

**2-16 Graduates are competent in managing a diverse patient population and have the interpersonal and communication skills to function successfully in a multicultural work environment.**

**Intent:**

Students should learn about factors and practices associated with disparities in health status among subpopulations, including but not limited to, racial, ethnic, geographic, or socioeconomic groups. In this manner, students will be best prepared for dental practice in a diverse society when they learn in an environment characterized by, and supportive of, diversity and inclusion. Such an environment should facilitate dental education in:

- basic principles of culturally competent health care;
- recognition of health care disparities and the development of solutions;
- the importance of meeting the health care needs of dentally underserved populations, and;
- the development of core professional attributes, such as altruism, empathy, and social accountability, needed to provide effective care in a multi-dimensionally diverse society.

*The University of Florida College of Dentistry is in compliance with Standard 2-16.*

<b>Standard 2-16: Managing a Diverse Patient Population &amp; Functioning Successfully in a Multicultural Work Environment</b>	
UFCD Competencies	<p><b>3: Communication and Interpersonal Skills:</b> Demonstrate culturally sensitive patient-centered communication using the scientific and lay literature and behavioral principles and strategies.</p> <p><b>7: Patient Management:</b> Apply behavioral and communicative management skills during clinical patient care. See <b>Appendix 2-3.5</b> UFCD Competencies for the New Dental Graduate.</p>
Certifying UFCD Course	<p><b>Appendix 2-5.1</b> Competency Reference Manual, lists all courses, competency assessments including forms. <b>Appendix 2-1.5</b> Course Syllabi Manual contains all course syllabi.</p> <p><b>Competency (C) 3*</b> = DEN5221: Oral Health Management and Psychosocial Issues Over the Lifespan</p> <p><b>C3</b> = DEN8019: Interdisciplinary Service Learning IV  <b>C3,7</b> = DEN8749L: Clinical Operative Dentistry 6  <b>C3,7</b> = DEN8838L: Comprehensive Periodontal Treatment 5</p> <p>* <b>C3=Competency #3, C7=Competency #7, C3,7=Competencies 3 &amp; 7</b></p>
UFCD Certifying Examination	<p><b>Standardized Patient Interview Competency Assessment</b>  <b>C3</b> = DEN5221: Standardized Patient Interview 3  <b>Written Examination</b>  <b>C3</b> = DEN8019: Interdisciplinary Service Learning IV  <b>Clinical Competency Assessments</b>  <b>C3,7</b> = DEN8749L: Caries Management Level 2 Skills Assessment for competency  <b>C3,7</b> = DEN8838L: Independent Skills-Based Assessment of Clinical Competency in Supportive Periodontal Therapy</p>
Narrative	Graduates are competent in managing a diverse patient population and function successfully in a multicultural work environment.

	<p>Institutions cannot achieve excellence without diversity. A multicultural work environment supports the integration of all individuals, no matter their country of origin, race, ethnicity, religion, or other characteristics that differ from those of the majority population. UFCD defines diversity broadly encompassing all aspects of individuals that contribute to a robust academic, research, and campus environment, including experiences, perspectives, disciplines, geographic background, talent, socio-economic background, disability, ethnicity, race, gender, and other characteristics. See <a href="#">Appendix 2-16.1</a> UF Diversity Action Plan.</p> <p>The diversity of the DMD student population, which is documented in Standard 4, is a powerful factor in shaping student attitudes and abilities to function in a multicultural environment. In both intramural TEAM clinical experiences, as well as extramural rotations in community safety net clinics, students must function in a diverse educational environment.</p> <p>Formative educational coursework and experiences are designed to develop and strengthen skills in managing a diverse patient population and to foster interpersonal communication skills which are necessary to prepare students for success in multicultural work environments. As such, course content contributing to patient management and interpersonal and communication skills are woven throughout the curriculum.</p>
Formative Experiences	<p><b>First-year curriculum</b></p> <p><i>DEN5010: Interdisciplinary Service Learning.</i> During this course and its second year companion course, <i>DEN6011</i>, students work in interdisciplinary teams requiring them to communicate and work together effectively. Groups of three health science students conduct four home visits, and serve as health information resources for their assigned families. Students also demonstrate their ability to work with an interdisciplinary team, communicate effectively, recognize social and cultural factors that influence patients, and work together effectively through assigned activities in six seminars with 12 other interprofessional student groups. Students are assessed by means of a group project presentation and a reflection paper.</p> <p><i>DEN5210: Developmental Biology and Psychosocial Issues Over the Lifespan.</i> The focus of this course is on the basic biology of normal growth and development of the head, neck and oral tissue as well as the relevant biological and psychosocial issues associated with normal changes over the lifespan that are relevant to oral health and the practice of dentistry. This course uses case-based learning in small groups, requiring students to analyze problems, assess their knowledge base, identify knowledge gaps and seek out additional information to work through the clinical case.</p> <p><i>DEN5221: Oral Health Management and Psychosocial Issues Over the Lifespan.</i> This course builds on the biological and psychosocial foundation knowledge that directly impacts the achievement and maintenance of oral health in patients over the lifespan. Students practice and receive feedback in interviews with standardized patients in this course. Students' third standardized patient interview is performed as a competency assessment.</p>

**Second-year curriculum**

*DEN6011: Interdisciplinary Service Learning II.* During this course and its first year companion course, *DEN5010*, students work in interdisciplinary teams, which require them to communicate and work together effectively. Students work in small groups in a team-based learning format on common public health issues. Students are expected to demonstrate their ability to work with an interdisciplinary team, communicate and work together effectively.

*DEN6015: Professionalism In Patient Care and Practice Management I.* This course is designed to provide instruction, and coach and mentor students in professionalism as they attain competency in patient care. This course spans semesters three to five and supports the student's progressive development in appropriate patient management skills, professionalism and integrity in the delivery of dental care, and critical thinking necessary for lifelong learning.

*DEN6502: Prevention and Public Health Dentistry.* This course provides dental students with the theoretical and practical foundation for dental public health, preventive dentistry and nutritional sciences.

*DEN6705L: Public Health Rotation.* This course utilizes experiential service learning in schools and public health clinical settings to expand students' understanding of the scientific and theoretical basis and practical application of clinical and population-based oral health surveillance, oral health promotion, access to care, health disparities and oral disease prevention. Student participation is evaluated using a rubric, which includes an evaluation of student's ability to demonstrate cultural sensitivity in the clinical rotation.

**Third-year curriculum**

*DEN7012: Interdisciplinary Service Learning III.* This course reinforces previous student experiences in an integrated service-learning framework. Students are expected to become more adept at working with diverse patient populations.

*DEN7016 and DEN7017: Professionalism In Patient Care and Practice Management II, III.* These courses introduce student dentists to basic concepts of clinical patient care. They include didactic material, clinical rotations, chart reviews, and the mechanics of daily patient management. The goal is to assist in the transition from the didactic and preclinical portion of the curriculum with the ultimate goal of developing competent dentists.

*DEN7826L: Clinical Pediatric Dentistry 2.* Students rotate through specialty clinics and are exposed to infant oral health evaluation and sedation using oral and nasal agents at the UF Pediatric Dental Residency Program, dental treatment of special need children and adults at Tacachale, and clinic pediatric dental care under general anesthesia at UF Health Shands Hospital. Students are assessed through attendance and participation.

**Fourth-year curriculum**

*DEN8708L, DEN8709L and DEN8710L: Community Dentistry 1, 2, 3.*

Students provide patient examinations and risk assessment with new and recall child and adult patients while on rotation in community dental centers and refer,

	as appropriate, based on clinical findings. Students are assessed on daily clinical procedures.
Summative Experience	<p><b>First-year curriculum</b>  <b>C3 = DEN5221: Standardized Patient Interview 3.</b> This course builds on biological and psychosocial foundation knowledge that directly impacts the achievement and maintenance of oral health in patients over the lifespan. Students are introduced to health disparities, the influence of cultural beliefs and practices on oral health, and culturally sensitive patient management and communication techniques. Students practice and receive feedback in interviews with standardized patients in this course. Students' third standardized patient interview is performed as a competency assessment.</p> <p><b>Fourth-year curriculum</b>  <b>C3 = DEN8019: Interdisciplinary Service Learning IV.</b> This course serves to provide a framework for interdisciplinary service learning in the final year. Students have, up to this point, experienced service-learning in a wide variety of settings, both clinical and non-clinical. At the conclusion of this course, the final reflective paper certifies competency by challenging students to draw upon their numerous experiences to evaluate their current and expected effectiveness in communicating with individuals and patients from a variety of diverse backgrounds.</p> <p><b>C3,7 = DEN8749L: Caries Management Level 2 Skills Assessment for competency.</b> In this course, senior students demonstrate competency in selected clinical operative dentistry patient care procedures. The caries management level 2 skills assessment for competency includes evaluation in the areas of patient education and interpersonal skills and certifies UFCD Competency 3 &amp; 7. Students must have completed one skills assessment in this area in order to challenge this competency. All clinical daily and competency assessments include an evaluation of patient and appointment management which includes an evaluation of "demonstrates sensitivity to cultural diversity."</p> <p><b>C3,7 = DEN8838L: Independent Skills-Based Assessment of Clinical Competency in Supportive Periodontal Therapy.</b> This course builds on the application of foundation knowledge in periodontics for the more advanced student and enhances performance skills in the assessment and maintenance of the patient with periodontitis. The Independent Skills Based Assessment of Competency in Supportive Periodontal Therapy is an assessment of clinical competency. All clinical daily and competency assessments include an evaluation of patient and appointment management, which includes an evaluation of "demonstrates sensitivity to cultural diversity."</p>

### Documentation submitted with the self-study

Appendix 2-16.1	UF Diversity Action Plan
Appendix 2-3.5	UFCD Competencies for the New Dental Graduate
Appendix 2-5.1	Competency Reference Manual
Appendix 2-1.5	Course Syllabi Manual

**2-18 Graduates must be competent in applying the basic principles and philosophies of practice management, models of oral health care delivery, and how to function successfully as the leader of the oral health care team.**

*The University of Florida College of Dentistry in compliance with Standard 2-18*

<b>Standard 2-18: Practice Management</b>	
UFCD Competency	<b>6: Practice Management:</b> Apply business principles, human resource skills, and the human and technologic resources to evaluate and manage oral health care delivery models and function as the leader of the oral health care team. See <b>Appendix 2-3.5</b> UFCD Competencies for the New Dental Graduate.
Certifying UFCD Courses	<b>Appendix 2-5.1</b> Competency Reference Manual lists all courses, competency assessments including forms. <b>Appendix 2-1.5</b> Course Syllabi Manual contains all course syllabi.  <i>DEN6502: Prevention and Public Health Dentistry</i> <i>DEN8321: Dental Practice Management</i>
UFCD Certifying Examinations	<b>Written Competency Examinations</b> <i>DEN6502: Written examination</i> <i>DEN8321: Written examination</i>
Narrative	<p>Graduates are competent in applying the basic principles and philosophies of practice management, models of oral health care delivery, and how to function successfully as the leader of the oral health care team.</p> <p>Practice management and models of oral health care delivery are introduced early in the DMD curriculum, starting with the first semester of instruction in <i>DEN5013: Foundations of Professionalism</i>, and culminating in <i>DEN8321: Dental Practice Management</i> in the senior year.</p> <p>Experiences in both college-based treatment clinics and community-based extramural rotations enable DMD students to experience a variety of delivery models, such as large group practice, community health centers, and school-based delivery models. Combined with participation in the TEAM program, experiences are provided to ensure that students become proficient in working with other members of the oral health care team, as well as contributing to the development of their leadership role as part of the dental team.</p> <p>An accumulation of foundation knowledge, ethical guidelines, clinical skills, legal standards and familiarity with current technology is critical to prepare students to be leaders of the health care team. In addition, the guided development of interpersonal skills to effectively interact with and manage staff and patients is vital to the overall success of dental graduates post-graduation. Places in the curriculum where the DMD students are provided opportunities to acquire this knowledge and skills are listed below.</p>
Formative Experiences	<b>First-year curriculum</b> <i>DEN5013: Foundations of Professionalism</i> . This first semester course focuses

	<p>on ethical decision-making and dental career options, and lays the groundwork for students in practice management, leadership and models of oral health care delivery. In <i>DEN5013</i>, students apply ethical principles appropriate to professional behavior and participate in small-group case discussions on clinical ethical dilemmas. Students interact with a panel of dentists in diverse career settings as a part of this course.</p> <p><i>DEN5221C: Oral Health Management and Psychosocial Issues Over the Lifespan.</i> This course provides further background in practice management by introducing formal instruction in the areas of dentist/patient interaction, communication skills, structured patient interviewing instruction, cultural competency, and stress management. Content is delivered in lectures, and small group and feedback sessions. The course also includes information about practice opportunities beyond a traditional private practice.</p> <p><i>DEN5320C: Foundations of Patient Care.</i> Formal practice management related instruction begins in this course. It introduces the principles of infection control, clinical safety and four-handed dentistry didactically and via small-group exercises.</p> <p><b>Second-year curriculum</b>  <i>DEN6705L: Public Health Rotations.</i> In this course second-year students are exposed to the organization and execution of oral public health experiences as part of a larger health care team, including dentists, hygienists, and health care providers from disciplines outside of dentistry. Students write a reflection paper on this public health experience.</p> <p><b>Third-year curriculum</b>  <i>DEN7016: Professionalism in Patient Care II.</i> This course prepares students for clinical entry and comprehensive oral treatment of their patients. In preparation for the professional development of the student-dentist, students receive didactic information to facilitate understanding of risk management, clinical quality assurance, ethical treatment planning and introduction to state practice regulations.</p> <p><b>Fourth-year curriculum</b>  <i>DEN8708L, DEN8709L, and DEN8710L: Community Dentistry I, II, III.</i> All fourth year students spend six weeks on extramural community-based clinical rotations. Students are placed in a variety of clinical safety-net settings. Dental students work one-on-one with an experienced dental assistant for the majority of these clinical experiences. Throughout the rotation experience, dental assistants provide constant feedback regarding assistant utilization, process and efficiency. See <a href="#">Appendix 2-18.1</a> Map of Extramural Rotation Sites.</p> <p><i>DEN8859L: Clinical Prosthodontics 5.</i> Experience interacting with the dental laboratory occurs routinely during clinical prosthodontic training. Students actively participate in case evaluation, quality assurance and effective communication with oversight from the prosthodontic faculty.</p>
Summative Experiences	<p><b>Second-year curriculum</b>  <i>DEN6502: Prevention and Public Health Dentistry.</i> In this course, students</p>

	<p>explore the theoretical and practical foundation for dental public health. A portion of the didactic material is devoted to exploration of different models of health care delivery. Issues surrounding oral health care delivery in a public and community health setting are addressed. The written examination in this course is a competency assessment.</p> <p><b>Fourth-year curriculum</b>  <i>DEN8321: Dental Practice Management.</i> This course provides background on theories and practices of business management and regulations governing the various practice models within our profession. Students are presented with background knowledge that allows them to develop business acumen as the leader of the oral health care team. This course includes Senior Professionalism Day where experiential learning from established dentists is provided to students through presentations. Topics discussed include dental leadership as practitioners and includes staff management. Dentist presenting vary in their practice models, providing students with a wide scope of examples. The course also includes lectures, independent study, and activities that include an overview of the Florida Dental Practice Act. In addition, the college's Office of Continuing Dental Education office develops and delivers a full-day program to provide background on current topics relevant to the practice of general dentistry. The final written exam serves to certify competency for this standard.</p>
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**Documentation submitted with the self-study**

- Appendix 2-3.5      UFCD Competencies for the New Dental Graduate
- Appendix 2-5.1      Competency Reference Manual
- Appendix 2-1.5      Course Syllabi Manual
- Appendix 2-18.1      Map of Extramural Rotation Sites

# Clinical Sciences

## 2-21 Graduates must be competent to access, critically appraise, apply, and communicate scientific and lay literature as it relates to providing evidence-based patient care.

**Intent:**

*The education program should introduce students to the basic principles of clinical and translational research, including how such research is conducted, evaluated, applied, and explained to patients.*

*The University of Florida College of Dentistry in compliance with Standard 2-21.*

<b>Standard 2-21: Access, Critically Appraise, Apply and Communicate Scientific and Lay Literature in Patient Care</b>	
UFCD Competencies	<p><b>3: Communication and Interpersonal Skills:</b> Demonstrate culturally sensitive patient-centered communication using the scientific and lay literature and behavioral principles and strategies.</p> <p><b>4: Critical Thinking:</b> Apply self-assessment, evidence-based decision making, problem solving skills and biomedical science knowledge in clinical patient care. See <b>Appendix 2-3.5</b> UFCD Competencies for the New Dental Graduate.</p>
Certifying UFCD Courses	<p><b>Appendix 2-5.1</b> Competency Reference Manual, lists all courses, competency assessments including forms. <b>Appendix 2-1.5</b> Course Syllabi Manual contains all course syllabi.</p> <p><b>Competency (C) 4*</b> = DEN6001: <i>Introduction to Evidence-Based Dental Practice</i></p> <p><b>C3</b> = DEN8749L: <i>Clinical Operative Dentistry 6</i></p> <p><b>C4</b> = DEN8768L: <i>Oral Diagnosis/Medicine &amp; Treatment Planning 3</i></p> <p><b>C3,4</b> = DEN8828L: <i>Clinical Pediatric Dentistry 4</i></p> <p><b>C3,4</b> = DEN8838L: <i>Comprehensive Periodontal Treatment 5</i></p> <p><b>* C3=Competency #3, C4=Competency #4, C3,4=Competencies 3 &amp; 4</b></p>
UFCD Certifying Examinations	<p><b>Written Competency Examinations</b></p> <p><b>C4</b> = DEN6001: <i>Introduction to Evidence-Based Dental Practice</i></p> <p><b>Clinical Competency Assessments</b></p> <p><b>C3</b> = DEN8749L: <i>Caries Management Level 2 skills assessment for competency</i></p> <p><b>C3,4</b> = DEN8828L: <i>Patient Competency 1, and case based seminar</i></p> <p><b>C3,4</b> = DEN8838L: <i>Independent Skills-Based Assessment of Clinical Competency in Supportive Periodontal Therapy</i></p> <p><b>Case Presentation Competency</b></p> <p><b>C4</b> = DEN8768L: <i>Case Completion Presentation Board Competency Assessment</i></p>
Narrative	Graduates are competent to access, critically appraise, apply and communicate

scientific and lay literature as it relates to providing evidence-based patient care.

UFCD students develop their competencies to access, critically appraise, apply, and communicate scientific and lay literature as it relates to providing evidence-based patient care in several UFCD courses throughout their four-year curriculum. Beginning in semester one in their first-year, students learn how to access scientific and lay literature through online tutorials posted in *DEN5210: Developmental Biology and Psychosocial Issues Over the Lifespan*, which incorporates small group case-based learning. Students also role-play communicating the scientific and lay literature to a patient in these sessions.

In semester three in the second year, students learn the fundamentals of evidence-based decision making, including different study designs, the levels of evidence and the critical appraisal of the scientific literature in *DEN6001: Introduction to Evidence-Based Dental Practice*. Students use small group exercises and presentations to appraise peer-reviewed and lay literature and to practice evidence-based decision-making. They continue to build on this knowledge in semester four by working on evidence-based simulated patient cases in axiUm in *DEN6302C: Introduction to Clinical Diagnosis and Treatment Planning* and on a case in small groups in *DEN6432C: Basic Endodontic Therapy*.

In year three, the clinical treatment planning courses, *DEN7761L: Oral Diagnosis/Medicine & Treatment Planning 1*, *DEN7766L: Oral Diagnosis/Medicine & Treatment Planning 2*, and periodontology courses, *DEN7834L: Comprehensive Periodontal Treatment 1*, *DEN7835L: Comprehensive Periodontal Treatment 2*, *DEN7836L: Comprehensive Periodontal Treatment 3* provide the clinical environment where students apply concepts and communicate scientific and lay literature as they develop evidence-based treatment plans with their patients. In addition, *DEN7433: Evidence-based Endodontics* utilizes discussion of clinical cases and an analysis of endodontic literature to facilitate clinical decision making. In *DEN7717: Clinical Use of Dental Materials*, students manipulate dental materials and discuss the related evidence in one-on-one sessions with faculty.

In the senior year, *DEN8263: Advanced Oral Medicine and Clinical Pharmacology*, students meet in small groups to review cases and to appraise associated scientific literature and clinical guidelines in the application of critical thinking to diagnosis and treatment decisions in cases. In *DEN8719C: Selection of Clinical Dental Materials*, students critically appraise selected articles through their group presentations.

Certification of competency in critical thinking is assessed in the written examination in *DEN6001: Introduction to Evidence-Based Dental Practice* and in the presentation of the completed case in *DEN8768L: Oral Diagnosis/Medicine and Treatment Planning 3* in the Case Completion Presentation Board Competency Assessment.

Certification of competency in critical thinking and communication skills is assessed clinically in *DEN8837L and DEN8838L: Comprehensive Periodontal Treatment 4 & 5*.

<p>Formative Experiences</p>	<p><b>First-year curriculum</b>  <i>DEN5210: Developmental Biology and Psychosocial Issues Over the Lifespan.</i> This course uses case-based learning in small groups, a behavioral research paper, and presentation and lectures to introduce developmental biological and psychosocial foundation knowledge across the lifespan. In case-based learning, students identify knowledge gaps, develop research questions and role play how they would communicate these findings to the patient. Faculty facilitators encourage students to analyze problems and appraise scientific and lay literature as they progress through the clinical case.</p> <p><b>Second-year curriculum</b>  <i>DEN6001: Introduction to Evidence-Based Dental Practice.</i> This course introduces the fundamentals of evidence-based decision making processes and critical evaluation of the scientific literature. It also discusses an introduction to different study designs; types of articles, levels of evidence; web-based information, bias and confounding and the critical appraisal process, including evaluation tools. Students also receive guidance and feedback during their library seminars on their database search. Following lectures, student small-groups complete four team exercises and receive formative feedback from faculty. Students also receive formative feedback for their submitted final evidence-based dental project before, during and after their team presentations.</p> <p><i>DEN6302C: Introduction to Clinical Diagnosis and Treatment Planning.</i> This course is designed to integrate foundation knowledge with its clinical application, improve clinical reasoning skills, and encourage decision-making based on evidence-based principles. The course uses large-group participation, small-group seminars, and clinical laboratories to develop these skills. In the small-group seminars students create problem lists and appraise scientific and lay literature to develop an evidence-based diagnosis paired with an appropriate treatment based on the simulated patient cases in axiUm.</p> <p><i>DEN6432C: Basic Endodontic Therapy.</i> This course uses small-group case-based learning, a series of lectures, and preclinical laboratory exercises, to teach the fundamental concepts and clinical techniques to perform endodontic therapy. Students apply critical thinking in the small-group case-based experience through self-assessment of knowledge gaps and self-directed learning in lay and peer-reviewed literature. Students role-play how they would communicate these findings to the patient.</p> <p><b>Third-year curriculum</b>  <i>DEN7422C: Periodontal Surgery for the General Practitioner.</i> The objective of this course is to define the role of the contemporary general dentist in the treatment or referral or postoperative care of the periodontal patient who requires surgical therapy based on current evidence in the literature.</p> <p><i>DEN7433: Evidence-based Endodontics.</i> This course includes online lectures, discussion of cases in class, team-based learning and an avatar emergency patient assignment. This is to foster student analysis of diagnostic data, plan a broad scope of endodontic treatment and relate this treatment to other disciplines utilizing an evidence-based approach to facilitate clinical decision</p>
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	<p>making.</p> <p><i>DEN7717: Clinical Use of Dental Materials.</i> In this rotation course, students manipulate dental materials and must demonstrate critical thinking through an oral examination. Students are responsible for summarizing the evidence of the associated material, its physical properties, clinical characteristics, appropriate material selection and, when appropriate, any controversial issues related to the materials.</p> <p><i>DEN7744L, DEN7745L, DEN7746L: Clinical Operative Dentistry series, 1 through 3.</i> Level 1 Operative Clinical Skills Assessments: Class II Restoration, Complex Class II Restoration, Class III Restoration, Class IV Restoration, Class V Restoration can be challenged in the junior year. These same assessments serve as clinical competencies (Level 2 Skills Assessments) in the senior year.</p> <p><i>DEN7761L: Oral Diagnosis/Medicine and Treatment Planning 1.</i> In this initial clinical course, students assess patient medical and dental histories, and complete examinations including photographs, radiographs, study models and full hard and soft tissue charting on their assigned comprehensive care patients. Students also use culturally-sensitive patient-centered communication using scientific and lay literature and behavioral principles and strategies in formulating a treatment plan (and alternative treatment plans as necessary).</p> <p><i>DEN7766: Oral Diagnosis/Medicine and Treatment Planning 2.</i> In this course, students continue to assess patient medical and dental histories, and complete examinations including photographs, radiographs, study models and full hard and soft tissue charting on their assigned comprehensive care patients. Students also use culturally-sensitive patient-centered communication using scientific and lay literature and behavioral principles in formulating a treatment plan (and alternative treatment plans, as necessary).</p> <p><i>DEN7836L: Comprehensive Periodontal Treatment 3.</i> In this clinical course, students continue to build on their examination, diagnosis and treatment planning skills as they apply scientific literature and critical thinking to determine a more complex patient's periodontal diagnosis and prognosis. This course, along with <i>DEN8837L</i>, includes a one-week rotation in the graduate periodontics residency program during which students demonstrate critical thinking through their participation in a comprehensive literature review.</p> <p><b>Fourth-year curriculum</b></p> <p><i>DEN8719C: Selection of Clinical Dental Materials.</i> In small groups, students critically appraise selected articles through presentations they provide to the other members of the group and the course director.</p> <p><i>DEN 8827L: Clinical Pediatric Dentistry 3.</i> In the case-based seminar in this clinical course, students apply assigned reading of research-oriented articles on pediatric dental restorative materials and techniques to selected cases in pediatric dental patient care.</p>
Summative Experiences	<p><b>Second-year curriculum</b></p> <p><b>C4 = DEN6001: Introduction to Evidence-Based Dental Practice.</b> In addition to</p>

being a formative experience course, the final written examination includes critical appraisal of the scientific and lay literature and is one of the certifications of competency in critical thinking.

**Fourth-year curriculum**

**C3 = DEN8749L: Caries Management Level 2 skills assessment for competency.**

In this course, senior students demonstrate competency in selected clinical operative dentistry patient care procedures. The caries management level 2 skills assessment for competency includes evaluation in the areas of patient education and interpersonal skills and certifies UFCD Competency 3. Students must have completed one skills-assessment in this area in order to challenge this competency.

**C4 = DEN8768L: Oral Diagnosis/Medicine and Treatment Planning 3.** In this course, students present a completed comprehensive care patient case to a faculty panel. Critical appraisal of the literature is integral to this process as students must include a minimum of three articles used in providing evidence-based care. This case presentation is one of the competency assessments for critical thinking.

**C3,4 = DEN8828L: Clinical Pediatric Dentistry 4.** Senior students challenge a patient care competency in this course: 1) New patient (D0150) or recall (0120) examination. Evaluation of student performance includes "Professionalism and Patient Management" which encompasses evidence-based judgment, interpersonal skills and use of behavior management strategies. In the case-based seminar students read the literature and apply it to selected cases. Evaluation is by means of a written examination.

**C3,4 = DEN8838L: Comprehensive Periodontal Treatment 5.** After completing three supportive periodontal treatment assessments, students may challenge the Independent Skills-Based Assessment of Clinical Competency in Supportive Periodontal Therapy competency. This clinical post periodontal assessment is one of the competency assessments for application of critical thinking and communication of scientific and lay literature to provide evidence-based dental care.

**Documentation submitted with the self-study**

Appendix 2-3.5

UFCD Competencies for the New Dental Graduate

Appendix 2-5.1

Competency Reference Manual

Appendix 2-1.5

Course Syllabi Manual

**2-22 Graduates must be competent in providing oral health care within the scope of general dentistry to patients in all stages of life.**

*The University of Florida College of Dentistry is in compliance with Standard 2-22.*

<b>Standard 2-22: Providing Oral Health Care to Patients in all Stages of Life</b>	
UFCD Competencies	<ol style="list-style-type: none"> <li>1: Apply ethical standards as a professional.</li> <li>2: Apply legal standards (state and federal regulations) to professional practice.</li> <li>3: Demonstrate culturally sensitive patient-centered communication using the scientific and lay literature and behavioral principles and strategies.</li> <li>4: Apply self-assessment, evidence-based decision making, problem solving skills and biomedical science knowledge in clinical patient care.</li> <li>5: Analyze the outcomes of patient care, previous treatment, appropriate recall and best evidence to improve and maintain oral health.</li> <li>7: Apply behavioral and communicative management skills during clinical patient care.</li> <li>9: Perform an evidence-based comprehensive patient evaluation to include patient history including medications, chief complaint(s), medical, oral and extraoral conditions, biological, behavioral, cultural, socioeconomic information, and consultation(s) to assess the patient’s prognosis and treatment risks.</li> <li>10: Interpret and correlate findings from the patient history, interview, clinical and radiographic examinations, and other diagnostic tests to accurately assess patients with special needs and for all other patients across the lifespan determine a differential, provisional, or definitive diagnosis.</li> <li>11: Develop properly sequenced treatment and/or referral plan options, as appropriate, to achieve patient satisfaction that includes obtaining informed consent; and modify the accepted plan, when appropriate.</li> <li>12: Prevent, recognize and manage dental and medical emergencies in the office.</li> <li>13: Prescribe and/or apply clinical and/or home therapies for the management of dental caries and monitor their effect on the patient’s oral health.</li> <li>14: Perform restorative and esthetic procedures that preserve tooth structure, prevent hard tissue disease, promote soft tissue health and replace missing teeth with prostheses.</li> <li>15: Prevent, diagnose and manage periodontal diseases.</li> <li>16: Manage conditions requiring surgical procedures of the hard and soft tissues.</li> <li>17: Diagnose and manage temporomandibular disorders.</li> <li>18: Diagnose and manage limited occlusal abnormalities.</li> <li>19: Prevent, diagnose and manage pulpal and periradicular diseases.</li> <li>20: Manage oral mucosal and osseous disorders including oral cancer.</li> </ol> <p>See <b>Appendix 2-3.5</b> UFCD Competencies for the New Dental Graduate.</p>
Certifying UFCD Courses	<p><b>Appendix 2-5.1</b> Competency Reference Manual, lists all courses, competency assessments including forms. <b>Appendix 2-1.5</b> Course Syllabi Manual contains all course syllabi.</p>

	<p><i>DEN5302C: Foundations of Patient Care</i>  <i>DEN7452C: Fundamentals of Pediatric Dentistry</i>  (Class of 2015) <i>DEN7762L: Clinical Radiology 1: Radiographic Technique and Interpretation</i>  <i>DEN7805L: Clinical Oral Surgery I</i>  (Class of 2014) <i>DEN7819L: Clinical Orthodontics</i>  <i>DEN8018: Professionalism in Patient Care and Practice Management IV</i>  (Class of 2014) <i>DEN8739L: Clinical Endodontics 5</i>  <i>DEN8749L: Clinical Operative Dentistry 6</i>  (Class of 2014) <i>DEN8767: Clinical Oncology and Oral Pathology</i>  <i>DEN8768: Oral Diagnosis/Medicine &amp; Treatment Planning 3</i>  <i>DEN8828L: Clinical Pediatric Dentistry 4</i>  <i>DEN8838L: Comprehensive Periodontal Treatment 5</i>  <i>DEN8859L: Clinical Prosthodontics 5</i></p>
<p>UFCD  Certifying  Examinations</p>	<p><b>Written Competency Assessments</b>  <b>Competency (C)1,2,11*</b> = <i>DEN7452C: Fundamentals of Pediatric Dentistry</i> - Written examinations  <b>C17</b> = <i>DEN7417: Orofacial Pain</i> - Written examination  <b>C18</b> = <i>DEN7819: Clinical Orthodontics</i> (Class of 2014) - Written case-based evaluations  <b>C1</b> = <i>DEN8018: Professionalism in Patient Care and Practice Management</i> (Class of 2014) - Clinical Ethical Dilemma paper  <b>C20</b> = <i>DEN8767: Clinical Oncology and Oral Pathology</i> (Class of 2014) -Written examination  <b>C4,12</b> = <i>DEN8828L: Clinical Pediatric Dentistry 4</i> - Case based seminar</p> <p><b>Simulation Competency Assessments</b>  <b>C19</b> = <i>DEN8827L: Clinical Pediatric Dentistry 3</i>, Simulation competency on Typodont Pulpotomy (access opening and pulpal debridement only) on tooth K.  <b>C14</b> = <i>DEN8828L: Clinical Pediatric Dentistry 4</i>, Simulation competency on Typodont Class III composite tooth F, Simulation competency composite strip crown tooth E.  <b>C14</b> = <i>DEN8859L: Clinical Prosthodontics 5</i> (Class of 2015), Implant prosthesis laboratory skills assessment and Laboratory communication skills assessment for competency.  <b>C12</b>= <i>DEN5302C: Foundations of Patient Care</i>, BLS CPR Certification Examination.</p> <p><b>Clinical Competency Assessments</b>  <b>C7,9,10,12,16</b> = <i>DEN7805L: Clinical Oral Surgery I Maxillary Tooth Extraction, Mandibular Tooth Extraction, Dental Emergency</i>  <b>C19</b> = <i>DEN8739L: Clinical Endodontics 5</i> (Class of 2014) Anterior/Premolar/Molar Diagnosis and RCT Competency  <b>C1,14</b> = <i>DEN8749L: Operative Dentistry Level 2</i> skills assessments for competency: Class II Composite/Amalgam; Complex Class II Composite/Amalgam; Class III Composite; Class IV Composite; Class V Composite.  <b>C1,3,7,13</b> = <i>DEN8749L: Caries Management Operative Dentistry Level 2</i> skills assessment for competency.  <b>C3,5,7,9,10,11,12,13,14,15,18</b> = <i>DEN8828L: Clinical Pediatric Dentistry 4</i></p>

	<p>Comp. Patient Competency 2 &amp; 3 and case based seminar.  <b>C3,4,5,7,10,15 = DEN8838L: Comprehensive Periodontal Treatment 5</b>  Independent Skills-Based Assessment of Clinical Competency in Supportive Periodontal Therapy.  <b>C14 = DEN8859L: Clinical Prosthodontics 5 (Class of 2015)*</b> Clinical skills assessments for competency: Single Posterior Crown; Single Anterior Crown; Fixed partial denture; Removable partial denture design; Removable partial denture patient treatment; Complete denture patient treatment.  *Please note for the Class of 2015, clinical competency assessments were renamed skills assessments. In all other aspects the assessments are identical for the Class of 2015 and prior classes.  <b>C14 = DEN8859L: Clinical Prosthodontics 5 (Prior to Class of 2014)</b>, Six Clinical Competency Assessments: Single Posterior Crown; Single Anterior Crown; FPD; RPD Design; RPD Case; Complete Dentures.  <b>C20= DEN7762L: Clinical Radiology 1 (Class of 2015):</b> Radiographic Technique and Interpretation.</p> <p><b>Case Presentation Competency</b>  <b>C2,4,9,10,11 = DEN8768L: Oral Diagnosis/Medicine &amp; Treatment Planning 3</b>  Case Completion Presentation Board Competency Assessment.  <b>C14 = DEN8859L: Clinical Prosthodontics 5 (Class of 2015)</b>, Overall Prosthodontics Competency Examination.</p> <p><b>* C1=Competency #1, C2=Competency #2, C1,2=Competencies 1 &amp; 2</b></p>
Narrative	<p>We define general dentistry as the evaluation, diagnosis, prevention, and/or treatment (nonsurgical, surgical, or related procedures) of diseases, disorders, and/or conditions of the oral cavity, maxillofacial area, and/or the adjacent and associated structures and their impact on the human body; provided by a dentist, within the scope of his/her education, training, and experience, in accordance with the ethics of the profession and applicable law. (As adopted by the 1997 ADA House of Delegates).</p> <p>Specifically the UF College of Dentistry provides a dental education which is appropriate for an entry-level general dentist to treat patients across the lifespan.</p> <p>A general dentist graduate of UF College of Dentistry will be able to provide dental care in an ethical, legal, culturally sensitive, patient centered manner. The general dentist will apply self-assessment, evidence-based decision making and problem-solving skills to the analysis of clinical outcomes of patient care. The scope of general dentistry is further defined in the college competency document <b>Appendix 2-3.5 UFCD Competencies for the New Dental Graduate.</b></p> <p>UF dental graduates are competent in providing oral health care to children and adult patients. Students can demonstrate competency in providing oral health care at the general dentist level to children (defined as ages 6-21) through the intramural clinical pediatric dentistry curriculum.</p>

<p>Formative Experiences</p>	<p>This standard includes nearly the entirety of the UF College of Dentistry DMD curriculum. The curriculum is built on foundational biomedical, psychosocial and clinical knowledge that spans four academic years and employs a competency-based curriculum with a combined biological and psychosocial approach, organized around six conceptual streams to foster integration of the basic, behavioral and clinical sciences.</p> <p><b>First-year curriculum</b>  <i>DEN5010: Interdisciplinary Service Learning I</i>  <i>DEN5100C: Gross Anatomy</i>  <i>DEN5120: Physiology</i>  <i>DEN5121: Biochemistry, Molecular &amp; Cellular Biology</i>  <i>DEN5126: Histology</i>  <i>DEN5127: Infectious Diseases</i>  <i>DEN5210: Developmental Biology and Psychosocial Issues Over the Lifespan</i>  <i>DEN5221: Oral Health Management and Psychosocial Issues Over the Lifespan</i>  <i>DEN5320C: Foundations of Patient Care</i>  <i>DEN5404C: Dental Anatomy and Stomatognathics</i>  <i>DEN5405C: Preclinical Operative Dentistry 1</i></p> <p><b>Second-year curriculum</b>  <i>DEN6001: Introduction to Evidence-based Practice</i>  <i>DEN6011: Interdisciplinary Service Learning II</i>  <i>DEN6015: Professionalism in Patient Care and Practice Management I</i>  <i>DEN6128: Host Defense</i>  <i>DEN6213C: Fundamentals of Occlusion</i>  <i>DEN6250: Pain and Anxiety Control in Dentistry</i>  <i>DEN6251: Science and Clinical Management of Dental Pain</i>  <i>DEN6260: Oral Medicine and Pharmacotherapeutics</i>  <i>DEN6301: Fundamentals of Oral and Maxillofacial Radiology</i>  <i>DEN6302: Introduction to Clinical Diagnosis and Treatment Planning</i>  <i>DEN6350: General Pathology</i>  <i>DEN6351: Oral Pathology</i>  <i>DEN6407C: Preclinical Operative Dentistry II</i>  <i>DEN6408C: Preclinical Operative Dentistry III</i>  <i>DEN6415C: Preclinical Fixed Prosthodontics II</i>  <i>DEN6421C: Periodontic Treatment Planning and Disease Control</i>  <i>DEN6430C: Principles of Endodontics</i>  <i>DEN6432C: Basic Endodontic Therapy</i>  <i>DEN6502: Prevention and Public Health Dentistry</i>  <i>DEN6705: Public Health Rotation</i></p> <p><b>Third-year curriculum</b>  <i>DEN7012: Interdisciplinary Service Learning III</i>  <i>DEN7319: Dental Care for the Geriatric Patient</i>  <i>DEN7417: Orofacial Pain</i>  <i>DEN7422: Periodontal Therapy for the General Practitioner</i>  <i>DEN7443L: Hospital Dentistry</i>  <i>DEN7450C: Orthodontics for the General Practitioner</i>  <i>DEN7452: Fundamentals of Pediatric Dentistry</i>  <i>DEN7735L,7736L: Clinical Endodontics 1,2</i></p>
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	<p>DEN7735L,7736L: <i>Clinical Endodontics 1,2</i>  DEN7744L, 7745L, &amp; 7746L: <i>Clinical Operative Dentistry 1,2,3</i>  DEN7762L: <i>Clinical Radiology 1: Radiographic Technique and Interpretation</i>  DEN7826L: <i>Clinical Pediatric Dentistry 2</i>  DEN7834L, 7835L, 7836L: <i>Comprehensive Periodontal Treatment 1,2,3</i></p> <p><b>Fourth-year curriculum</b>  DEN8018: <i>Professionalism in Patient Care and Practice Management IV</i>  DEN8303: <i>Advanced Radiographic Interpretation</i>  DEN8423: <i>Periodontics In General Practice</i>  DEN8708L, 8709L, 8710L: <i>Community Dentistry I,II,III</i>  DEN8739L: <i>Clinical Endodontics 5</i>  DEN8747L, 7748L: <i>Clinical Operative Dentistry 4 &amp; 5</i>  DEN8767: <i>Clinical Oncology and Oral Pathology</i>  DEN8768L: <i>Oral Diagnosis/Medicine and Treatment Planning 3</i>  DEN8827L: <i>Clinical Pediatric Dentistry 3</i>  DEN8859L: <i>Clinical Prosthodontics 5</i>  DEN8838L: <i>Comprehensive Periodontal Treatment 5</i></p>
Summative Experiences	<p><b>First-year curriculum</b>  <b>Competency(C)12 = DEN5302C: Foundations of Patient Care.</b> Students are certified in Cardiopulmonary Resuscitation at the Basic Life Support level in this course for adults, children and infants. Students are recertified in CPR at the BLS level in the third DMD year in <i>DEN7707: Professionalism in Patient Care and Practice Management III</i>.</p> <p><b>Third-year curriculum</b>  <b>Competency (C)1,2,11 = DEN7452C: Fundamentals of Pediatric Dentistry.</b> The written examinations for this course are competency certifications for ethical, legal, patient referral, and assessment of special needs patients.</p> <p><b>C20= DEN7762L: Clinical Radiology 1: Radiographic Technique and Interpretation.</b> Students prescribe and take appropriate radiographs on all comprehensive care patients. Students may challenge a technique competency after they have successfully completed three prior procedures, five radiographic interpretations and complete a self-assessment.</p> <p><b>C7,9,10,12,16 = DEN7805L: Clinical Oral Surgery I.</b> After completing at least one similar procedure prior to challenging competency, students may challenge the clinical competency assessments for maxillary tooth extraction, mandibular tooth extraction, and evaluation and treatment of a dental emergency.</p> <p><b>C18 = DEN7819: Clinical Orthodontics (Class of 2014).</b> Written case-based evaluations - Level One Competency: Students perform an Ackerman-Proffit analysis on two cases provided. Level Two Competency: Students perform an Ackerman-Proffit analysis for two additional cases and list treatment options and whether the case should be referred. Level Three Competency: Students review two additional orthodontic cases considering oral-facial growth and development stages, and make recommendations for how they would present to the</p>

patient/parent, as well as how they would present to a colleague/specialist.

**Fourth-year curriculum**

**C1 = DEN8018: Professionalism in Patient Care and Practice Management IV.** Clinical Ethical Dilemma paper. Senior students write about a personal dental ethical dilemma of their choosing and discuss this with a small group of students and American College of Dentist members. An evaluation rubric is used for this competency assessment.

**C19 = DEN8739L: Clinical Endodontics 5.** The Anterior/Premolar/Molar Diagnosis and RCT Competency tests students' competency in patient assessment and treatment relative to nonsurgical endodontic treatment. Students may challenge the competency once they have demonstrated adequate prior experience in endodontic therapy through the accumulation of at least five endodontics case points.

**C1,14 = DEN8749L: Clinical Operative Dentistry 6.** Students demonstrate competency by means of five clinical Level 2 skills assessments for competency: Class II Composite/Amalgam; Complex Class II Composite/Amalgam; Class III Composite; Class IV Composite; Class V Composite. Students must initially complete one clinical patient treatment for each of the above assessments prior to challenging the junior year Level 1 formative skills assessments for these six procedures. Students may challenge these same procedures as Level 2 skills assessments for competency in their senior year once all junior year skills assessments are successfully completed.

**C1,3,7,13 = DEN8749L: Clinical Operative Dentistry 6.** Students demonstrate competency by means of the clinical Caries Management Level 2 skills assessment for competency. This assessment of competency in Caries Management is structured in a similar manner to the restorative Level 2 skills assessments for competency described above.

**C20 = DEN8767: Clinical Oncology and Oral Pathology (Class of 2014).** Written examination. Students gain experience in obtaining comprehensive medical and dental histories from patients with life-threatening diseases.

**C2,4,9,10,11 = DEN8768L: Oral Diagnosis/Medicine and Treatment Planning 3.** In this course, students present a completed comprehensive care patient case to a faculty panel. Critical thinking, evidence based dentistry, self-assessment and problem solving are integral parts of this process. This case presentation is a competency assessment.

**C19 = DEN8827L: Clinical Pediatric Dentistry 3,** Simulation competency on Typodont Pulpotomy (access opening and pulpal debridement only) on tooth K.

**C2,3,5,7,9,10,11,12,13,14,15,18 = DEN8828L: Clinical Pediatric Dentistry 4.** In this course, two clinical patient care competencies, Patient Competency 2 (local anesthesia), and Patient Competency 3 (patient treatment procedures) assess student competency.

Student competency in restorative procedures is evaluated in the simulation

	<p>competencies in this course, The Simulation Competency on Typodont Class III composite tooth F and the Simulation Competency Composite Strip Crown, tooth E, certify competency. Student competency in pediatric emergency treatment is certified through the case-based seminar and written examination in this course.</p> <p><b>C3,4,5,7,10,15 = DEN8838L: Comprehensive Periodontal Treatment 5.</b> After completing clinical phase one evaluations and treatment, senior students may challenge the supportive periodontal therapy competency.</p> <p><b>C14 = DEN8859L: Clinical Prosthodontics 5 (Class of 2015).</b> A comprehensive global assessment, Overall Prosthodontics Competency Examination, was implemented for the Class of 2015 in which students develop a comprehensive, evidence-based presentation of a completed patient which they present to a faculty board.</p> <p>(Class of 2015) An Implant prosthesis laboratory skills assessment for competency and a laboratory communication skills assessment for competency were also introduced in the curriculum for the Class of 2015.</p> <p>Clinical competency assessments for the restoration and/or replacement of teeth are evaluated through the following assessments in this course: single posterior crown, single anterior crown, three-unit fixed partial denture, removable partial denture design, removable partial denture patient treatment, and complete denture treatment.</p>
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**Documentation submitted with the self-study**

- Appendix 2-3.5           UFCD Competencies for the New Dental Graduate
- Appendix 2-5.1           Competency Reference Manual
- Appendix 2-1.5           Course Syllabi Manual