



# Baltimore College of Dental Surgery

## University of Maryland Dental School Competencies and Competency Examinations

As stated in its mission, the Dental School seeks to graduate exceptional oral health care professionals. Competency, the ability to demonstrate skill, knowledge, and attitude derived from specialized training and experience, is at the core of exceptional professionals. It relates to the treatment of the child, adolescent, adult, geriatric, and medically-compromised patient. At this Dental School, pre-doctoral dental students must demonstrate competency prior to graduation and entry into dental practice.

The following competency statements have been developed by the faculty of the University of Maryland Dental School. Together, they reflect the desired synthesis of educational outcomes of the biomedical, behavioral, and clinical curriculum of this Dental School. Prior to graduation, each student will have acquired knowledge, skills and values necessary to

- Utilize ethical reasoning in the practice of dentistry
- Communicate with and provide care for a diverse population of patients
- Utilize critical thinking and scientific knowledge in decision making processes involved in patient care
- Utilize principles of behavioral sciences for maintaining patient's oral health.
- Demonstrate self-assessment skills in maintaining competency
- Obtain informed consent for oral health therapies
- Assess a patient's medical, psychological and social history as it relates to dental treatment
- Secure a dental history that includes chief complaint, patient expectations, and past dental history
- Communicate effectively with other professionals regarding the care of patients
- Perform an exam of the hard and soft tissues of the head and neck
- Order, obtain, and interpret appropriate dental radiographs
- Assess the risk for and presence of caries and periodontal disease
- Formulate and present to a patient a primary treatment plan and alternative plans based on relevant findings and individual patient considerations
- Manage medical emergencies that occur in dental practice
- Manage acute pain or dental anxiety
- Manage odontogenic infections
- Develop and implement interceptive strategies to control and prevent dental caries and periodontal diseases in individual patients
- Provide non-surgical treatment for patients with periodontal diseases ranging from

gingivitis to moderate periodontitis

Restore missing or defective tooth structure to proper form, function and esthetics

Replace missing teeth and surrounding oral tissues to proper form, function and esthetics

Manage pulpal disease and related periradicular pathology

Differentiate normal from altered oral soft tissues and determine the need for additional diagnostic information

Perform minor alveolar and mucogingival surgery within the oral cavity

Identify and manage space problems and simple malocclusions

Evaluate effectiveness of preventive, maintenance, and reparative therapies through assessment of treatment outcomes

Comply with regulations related to patient confidentiality, infection control, hazard communications, radiation safety and medical waste disposal

Evaluate different models of oral health care management and delivery

Utilize basic principles of practice management and have the skills to function as the leader of an oral health team

The educational opportunities and guided experiences of the pre-doctoral dental education program at the University of Maryland are designed to prepare the new graduate for entry into the profession of dentistry. Prior to graduation, pre-doctoral dental students are expected to demonstrate that they have attained competence. The Dental School employs specific exams to assure students meet the expectations articulated in the Maryland Competency Statements described above.

Competency exams are a formal didactic and/or practical examination, the requirements of which are standardized across the population of students being assessed. A competency exam assesses the knowledge, and/or skills, and/or values required to achieve a goal (or a set of goals) relative to the profession of dentistry and/or delivering oral health care. Each is graded according to written protocols. All competency exams must be successfully challenged prior to graduation. A competency exam may be any of the following:

- Case based report - standardized
- Demonstration - clinical performance
- Demonstration - simulated patient/typodont/laboratory
- Exam - oral case-based
- Exam - written (responding to e-files)
- Exam - written (case-based)
- Exam - written (testing didactic material)
- Presentation - oral
- Review of literature
- Review of patient clinical records

Students are apprised of competency exams and their requirements in one or more ways:

- Course syllabi contain descriptions of competency exams included in the course

- Faculty discuss with students competency exams on the first day of class
- Clinic Manual contains descriptions of the competencies
- GP managers distribute information about clinical competency examinations and grading to their students
- Each GP maintains clinical competency evaluation forms

The Competency Exam Manual is a compilation of the reference documents developed for each competency exam. It lists prerequisites, grading protocols, remediation, and other pertinent information. The Competency Exam Manual is located on Blackboard, the campus e-learning software platform.

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### **Competency Assessment in Dental Courses**

(Faculty List of Competency Assessments for Course Syllabi)

#### **Competencies:**

#### ***(For instructors – include all below that apply and delete others)***

This course will address competencies each student is required to master prior to completion of the course of study. Specifically, the content of this course will:

#### **Provide a theoretical foundation for the following competencies:**

- Utilize ethical reasoning in the practice of dentistry
- Communicate with and provide care for a diverse population of patients
- Utilize critical thinking and scientific knowledge in decision making processes involved in patient care
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- Demonstrate self-assessment skills in maintaining competency
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- Restore missing or defective tooth structure to proper form, function and esthetics

- Replace missing teeth and surrounding oral tissues to proper form, function and esthetics
- Manage pulpal disease and related periradicular pathology
- Differentiate normal from altered oral soft tissues and determine the need for additional diagnostic information
- Perform minor alveolar and mucogingival surgery within the oral cavity
- Identify and manage space problems and simple malocclusions
- Evaluate effectiveness of preventive, maintenance, and reparative therapies through assessment of treatment outcomes
- Comply with regulations related to patient confidentiality, infection control, hazard communications, radiation safety and medical waste disposal
- Evaluate different models of oral health care management and delivery
- Evaluate different models of oral health care management and delivery
- Utilize basic principles of practice management and have the skills to function as the leader of an oral health team

**Teach skills contributing to the following competencies:**

***(For instructors – include all below that apply and delete others)***

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- Utilize basic principles of practice management and have the skills to function as the leader of an oral health team

**Assess the following competencies**

***(For instructors – include all below that apply and delete others)***

**Utilize ethical reasoning in the practice of dentistry**

- Case based ethics exam

**Communicate with and provide care for a diverse population of patients**

- Communication competency exam
- Case based competency exam
- Community based competency exam

**Utilize critical thinking and scientific knowledge in decision making processes involved in patient care**

- Case based conference reports
- Comprehensive care treatment planning competency exam (Year III)
- Pediatric dentistry treatment planning competency exam
- Periodontics treatment planning competency exam
- Comprehensive care treatment planning competency exam (Year IV)
- Periodontics treatment planning competency exam
- Pediatric dentistry treatment planning competency exam
- Written case-based pediatric dentistry competency exam
- Literature review for senior case presentation
- Utilize principles of behavioral sciences for maintaining patient's oral health
- Behavioral Science

**Demonstrate self-assessment skills in maintaining competency**

- Endodontics single-rooted tooth competency exam
- Orthodontic competency exam
- Endodontics multiple-rooted tooth competency exam
- Pediatric dentistry treatment planning competency exam
- Literature review for senior case presentations
- Outcomes assessment competency exam
- Literature review for senior case presentations

**Obtain informed consent for oral health therapies**

- Comprehensive care treatment planning competency exam (Year III)
- Literature review for senior case presentations
- Pediatric dentistry treatment planning competency exam
- Periodontics treatment planning competency exam

- Single tooth exodontia competency exam
- Complete denture competency exam
- Comprehensive care treatment planning competency exam (Year IV)
- Multi-tooth exodontia and alveoloplasty competency exam
- Nitrous oxide competency exam
- Pediatric dentistry treatment planning competency exam

**Assess a patient's medical, psychological and social history as it relates to dental treatment**

- Medical consultation competency exam

- Comprehensive care treatment planning competency exam (Year III)
- Pediatric dentistry treatment planning competency exam
- Periodontics treatment planning competency exam
- Comprehensive care treatment planning competency exam (Year IV)
- Pediatric dentistry treatment planning competency exam
- Periodontics treatment planning competency exam

**Secure a dental history that includes chief complaint, patient expectations, and past dental history**

- Medical consultation competency exam
- Complete denture competency exam
- Oral Surgery Case Presentation Competency
- Prescription writing competency exam if can be made mandatory pass
- Removable partial denture case-based competency exam
- Biopsy competency exam

**Communicate effectively with other professionals regarding the care of patients**

- Medical consultation competency exam
- Complete denture competency exam
- Oral Surgery Case Presentation Competency
- Removable partial denture case-based competency exam
- Biopsy competency exam

**Perform an exam of the hard and soft tissues of the head and neck**

- Head and neck tissue evaluation competency exam

**Order, obtain, and interpret appropriate dental radiographs**

- Radiography interpretation competency exam
- Radiography visual and didactic exam
- Urgent care patient competency exam
- Radiographic technical competency exam

**Assess the risk for and presence of caries and periodontal disease**

- Head and neck tissue evaluation competency exam
- Comprehensive care treatment planning competency exam (Year III)
- Pediatric dentistry clinical competency exam
- Periodontics treatment planning competency exam
- Comprehensive care treatment planning competency exam (Year IV)
- Pediatric dentistry clinical competency exam
- Periodontics treatment planning competency exam

**Formulate and present to a patient a primary treatment plan and alternative plans based on relevant findings and individual patient considerations**

- Comprehensive care treatment planning competency exam (Year III)
- Pediatric dentistry treatment planning competency exam
- Periodontics treatment planning competency exam
- Comprehensive care treatment planning competency exam (Year IV)
- Pediatric dentistry treatment planning competency exam
- Periodontics treatment planning competency exam

**Manage medical emergencies that occur in dental practice**

- Basic Life Support Certification
- Management of Medical Emergencies Competency Exam

**Manage acute pain or dental anxiety**

- Urgent care competency exam
- Single tooth exodontia competency exam
- Nitrous oxide competency exam
- Multi-tooth exodontia and alveoloplasty competency exam

**Manage odontogenic infections**

- Endodontics single-rooted tooth competency exam
- Urgent care competency exam
- Endodontics multiple-rooted tooth competency exam
- Management of Medical Emergencies Competency Exam

**Develop and implement interceptive strategies to control and prevent dental caries and periodontal diseases in individual patients**

- Comprehensive care treatment planning competency exam (Year III)
- Patient education competency exam
- Pediatric dentistry sealant/PRR competency exam
- Pediatric dentistry treatment clinical competency exam
- Periodontics treatment planning competency exam
- Comprehensive care treatment planning competency exam (Year IV)
- Periodontics treatment planning competency exam

**Provide non-surgical treatment for patients with periodontal diseases ranging from gingivitis to moderate periodontitis**

- Patient education competency exam
- Periodontics treatment planning competency exam (Year III)
- Instrumentation competency exam (Year III)
- Periodontics treatment planning competency exam (Year IV)
- Instrumentation competency exam (Year IV)

**Restore missing or defective tooth structure to proper form, function and esthetics**

- Class II amalgam competency exam
- Class III/IV composite competency exam
- Single crown #15 competency exam
- Single crown #6 competency exam
- Pediatric dentistry restorative competency exam
- Cusp replacement competency exam
- Class II amalgam competency exam
- Class III/IV composite competency exam
- Complete crown competency exam

**Replace missing teeth and surrounding oral tissues to proper form, function and esthetics**

- Complete denture competency exam
- Removable partial denture case based competency exam
- Custom tray fabrication for edentulous patient competency exam
- Fixed partial denture preparation and provisionalization competency exam

**Manage pulpal disease and related periradicular pathology**

- Endodontics single-rooted tooth competency exam
- Urgent care competency exam
- Endodontics multiple-rooted tooth competency exam
- Endodontics recall competency exam

**Differentiate normal from altered oral soft tissues and determine the need for additional diagnostic information**

- Web-based hard and soft tissue considerations competency exam
- Soft Tissue Histopathology Service Competency Exam
- Head and neck tissue evaluation competency exam

**Perform minor alveolar and mucogingival surgery within the oral cavity**

- Case based oral pathology competency exam
- Multiple tooth exodontia and alveoloplasty exam

**Identify and manage space problems and simple malocclusions**

- Orthodontic typodont exercises
- Orthodontics laboratory procedural exam
- Orthodontics laboratory procedural exam

**Evaluate effectiveness of preventive, maintenance, and reparative therapies through assessment of treatment outcomes**

- Outcomes assessment competency exam
- Endodontics recall competency exam
- Outcomes assessment competency exam

**Comply with regulations related to patient confidentiality, infection control, hazard communications, radiation safety and medical waste disposal**

- Radiographic technical competency exam
- Standard precautions competency exam

**Evaluate different models of oral health care management and delivery**

- Practice management competency exam

**Utilize basic principles of practice management and have the skills to function as the leader of an oral health team**

- Practice management competency exam
- Behavioral science competency exam