DEH 101
PRE-CLINICAL DENTAL HYGIENE

PRESENTED AND APPROVED: JANUARY 10, 2013
EFFECTIVE: SPRING 2012-13
### Course Title: Pre-Clinical Dental Hygiene

<table>
<thead>
<tr>
<th>Purpose of this submission:</th>
<th>☑ New</th>
<th>☑ Change/Updated</th>
<th>☐ Retire</th>
</tr>
</thead>
</table>

If this is a change, what is being changed? (Check all that apply)

- ☑ Update Prefix
- ☑ Course Description
- ☑ Format Change
- ☑ Credits
- ☑ Prerequisite
- ☑ Competencies
- ☑ Textbook/Reviewed Competencies-no changes needed

Does this course require additional fees?  No  ☑ Yes  If so, please explain.  The Dental Hygiene program fee is attached to this course.

Is there a similar course in the course bank?  ☑ No  ☑ Yes (Please identify) DEH 101

Articulation: Is this course or an equivalent offered at other two and four-year universities in Arizona?

- ☑ No
- ☑ Yes (Identify the college, subject, prefix, number and title: DEH 101)

Is this course identified as a Writing Across the Curriculum course?  ☑ No  ☐ Yes

---

### Course Assessments

**Description of Possible Course Assessments (Essays, multiple choice, etc.)**

- Exams: multiple choice, fill-in, matching, essay, short answer, true/false, case studies. Quizzes: multiple choice, true/false. Final Lab Exam: Clinical Competency Required

**Student assignments and projects**

- Are exams required by the department?  ☑ No  ☑ Yes
- If Yes, please specify:

**Where can faculty members locate or access the required standardized exams for this course?**

---

### Student Outcomes: Identify the general education goals for student learning that is a component of this course.

**Check all that apply:**

1. Communicate effectively.
   - a. Read and comprehend at a college level.  ☑
   - b. Write effectively in a college setting.  ☑

2. Demonstrate effective quantitative reasoning and problem solving skills.  X

**Method of Assessment**

- Students must be able to effectively read their textbook and other forms of professional literature and communicate with classmates, instructors and patients based on knowledge gained. Evidence of reading comprehension is demonstrated on exams; quizzes; assignments; and projects. Effective writing skills are also demonstrated in short answer exam questions, student assignments and projects.

- Students demonstrate effective quantitative reasoning and problem solving skills by utilizing
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td><strong>Demonstrate effective qualitative reasoning skills.</strong></td>
<td>Students are required to evaluate the logic, reasoning and relevance of research and apply what they have learned. Evidence of this is demonstrated on assignments and projects.</td>
</tr>
</tbody>
</table>
| 4. | **Apply effective methods of inquiry.**  
   a. Generate research paper by gathering information from varied sources, analyzing data and organizing information into a coherent structure.  
   b. Employ the scientific method. |   |
| 5. | **Demonstrate sensitivity to diversity**  
   a. Experience the creative products of humanity.  
   b. Describe alternate historical, cultural, global perspectives. |   |

---

**Office of Instruction Use only:**

**CIP Code:**

**ONET Code:**

**Minimum Qualifications:**
### INSTRUCTION

**Course Package**

**COURSE INFORMATION**

<table>
<thead>
<tr>
<th>Initiator: Kathleen R. Baleno</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of proposal to Curriculum Committee: 01/10/2013</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effective Semester/Year</th>
<th>Fall 2013</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefix &amp; Number:</td>
<td>DEH 101</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Full Title:** (100 character limit)
Pre-Clinical Dental Hygiene

**Short Title:** (30 character limit)
Pre-Clinic

**Catalog Course Description:** Includes basic dental hygiene theory and development of basic clinical skills. Lectures, demonstrations, and laboratory experiences are related to dental hygiene patient treatment, including aseptic techniques and practices; patient assessment and principles of instrumentation.

<table>
<thead>
<tr>
<th>SUN Course Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Hours: 5</td>
</tr>
<tr>
<td>Lecture Hours: 2</td>
</tr>
<tr>
<td>Lab Hours: 6</td>
</tr>
</tbody>
</table>

**Prerequisite(s)** Admission into the Dental Hygiene Programs.

**Co-requisite(s)** DEH 101L

**Intended Course Goals**

**By the end of the semester, students will be able to:**

1. Explain the rationale for maintaining a strict chain of asepsis in the dental environment.
   - C1, C2, C3, C4, C5, C7, C8, C9, HP1, HP6

2. Identify the various deposits and accretions found on the teeth, their etiology and the disease conditions they generate.
   - C1, C2, C4, C7, C8, C9, C10, C11, HP4, HP5, HP6, PC1, PC2, PC3, PC4, PC5

3. Describe the rationale for preventative dental hygiene care, the value of oral hygiene and the relationship of prevention to gingival and periodontal disease.
   - C1, C2, C3, C4, C7, C8, C9, C10, HP1, HP2, HP3, HP4, HP5, HP6, PC1, PC2, PC3, PC5

4. Explain the rationale for obtaining and recording patient health data and oral health assessments.
   - C1, C2, C3, C4, C7, C8, C9, C10, HP1, HP2, HP3, HP4, HP5, HP6, PC1, PC2, PC5

5. Discuss the implications inherent in treating medically compromised patients.
   - C1, C2, C3, C4, C5, C7, C8, C9, C10, HP1, HP2, HP3, HP4, HP5, HP6, CM7, PC1, PC2, PC3, PC4, PC5, PC6, PC7, PC8, PC10

6. Demonstrate a working knowledge of dental nomenclature and the dental hygiene process of care.
   - C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C12, C13, HP1, HP2, HP3, HP4, HP5, HP6, PC1, PC2, PC3, PC4, PC5,
7. Demonstrate the proper and appropriate use and maintenance of instruments and equipment in the dental environment.

C1, C2, C3, C4, C5, C6, C7, C8, C9, HP6

8. Maintain a professional demeanor in all clinical, classroom and community endeavors.

C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, HP1, HP2, HP3, HP4, HP5, HP6, CM1, CM2, CM3, CM4, CM5, CM6, PC1, PC3, PC4, PC5, PC6, PC7, PC8, PC9, PC10, PC11, PC12, PC13, PGD1, PGD2, PGD3

Program Competencies and Objectives

By the end of the semester, students will be able to:

Program Competencies

Forward

This document describes the abilities expected of a dental hygienist entering the profession. The competency statements were originally drafted by The American Association of Dental Schools (now named ADEA), Section of Dental Hygiene Education Competency Development Committee, and presented in 1998. MCC has adapted the updated competencies approved in 2010 and implemented in 2011 to encompass the competencies we feel our graduates should possess.

As an integral member of the healthcare team, a major role of the hygienist is to assist patients to achieve and maintain optimal oral health. We feel the competencies listed below describe the desired combination of knowledge, psychomotor skills, communication skills, and attitudes, as well as the standards used to measure the hygienist’s independent performance.

Competency 1

Core Competencies (C)

The dental hygienist must possess the ethics, values, skills, and knowledge integral to all aspects of the profession. These competencies are foundational to all of the roles of the dental hygienist.

OBJECTIVES:

C.1 Apply a professional code of ethics in all endeavors.
C.2 Adhere to state and federal laws, recommendations, and regulations in the provision of oral health care.
C.3 Use critical thinking skills and comprehensive problem-solving to identify oral health care strategies that promote patient health and wellness.
C.4 Use evidence-based decision making to evaluate emerging technology and treatment modalities to integrate into patient dental hygiene care plans to achieve high-quality, cost-effective care.
C.5 Assume responsibility for professional actions and care based on accepted scientific theories, research, and the accepted standard of care.
C.6 Continuously perform self-assessment for lifelong learning and professional growth.
C.7 Integrate accepted scientific theories and research into educational, preventive, and therapeutic oral health services.
C.8 Promote the values of the dental hygiene profession through service-based activities, positive community affiliations, and active involvement in local organizations.
### Competency 2
**Health Promotion and Disease Prevention (HP)**

Since Health Promotion and Disease Prevention is a key component of health care, changes within the healthcare environment require the dental hygienist to have a general knowledge of wellness, health determinants, and characteristics of various patient communities. The hygienist needs to emphasize both prevention of disease as well as effective health care delivery.

**OBJECTIVES:**

| HP.1 | Promote the values of overall health and wellness to the public and organizations within and outside the profession. |
| HP.2 | Respect the goals, values, beliefs, and preferences of all patients |
| HP.3 | Refer patients who may have physiological, psychological, or social problems for comprehensive patient evaluation. |
| HP.4 | Identify individual and population risk factors and develop strategies that promote health-related quality of life. |
| HP.5 | Evaluate factors that can be used to promote patient adherence to disease prevention or health maintenance strategies. |
| HP.6 | Utilize methods to ensure the health and safety of the patient and the oral health professional in the delivery of care. |

### Competency 3
**Community Involvement (CM)**

The dental hygienist must appreciate his/her role as a health professional at the local, state, and national levels. This role requires the graduate dental hygienist to assess, plan, and implement programs and activities to benefit the general population. In this complex role, the dental hygienist must be prepared to influence others to facilitate access to care and services.

**OBJECTIVES:**

| CM.1 | Assess the oral health needs of the community to determine action plans and availability of resources to meet the health care needs. |
| CM.2 | Provide screening, referral, and educational services that allow patients to access the resources of the health care system. |
| CM.3 | Provide community oral health services in a variety of settings. |
| CM.4 | Facilitate patient access to oral health services by influencing individuals or organizations for the provision of oral health care. |
| CM.5 | Evaluate reimbursement mechanisms and their impact on the patient’s access to oral health care. |
| CM.6 | Evaluate the outcomes of community-based programs and plan for future activities. |
CM.7 Advocate for effective oral health care for underserved populations.

Competency 4
Patient Care (PC)

Because the dental hygienists’ role in patient care is ever changing, yet central to the maintenance of health, dental hygiene graduates must use their skills to assess, diagnose, plan, implement, and evaluate treatment

OBJECTIVES:

Assessment

PC.1 Systematically collect, analyze, and record data on the general, oral, and psychosocial health status of a variety of patients using methods consistent with medicolegal principles.
PC.2 Recognize predisposing and etiologic risk factors that require intervention to prevent disease.
PC.3 Recognize the relationships among systemic disease, medications, and oral health that impact overall patient care and treatment outcomes.
PC.4 Identify patients at risk for a medical emergency, and manage the patient care in a manner that prevents an emergency.

Dental Hygiene Diagnosis

PC.5 Use patient assessment data, diagnostic technologies, and critical decision making skills to determine a dental hygiene diagnosis, a component of the dental diagnosis, to reach conclusions about the patient’s dental hygiene care needs.

Planning

PC.6 Utilize reflective judgment in developing a comprehensive patient dental hygiene care plan.
PC.7 Collaborate with the patient and other health professionals as indicated to formulate a comprehensive dental hygiene care plan that is patient-centered and based on the best scientific evidence and professional judgment.
PC.8 Make referrals to professional colleagues and other health care professionals as indicated in the patient care plan.
PC.9 Obtain the patient’s informed consent based on a thorough case presentation.

Implementation

PC.10 Provide specialized treatment that includes educational, preventive and therapeutic services designed to achieve and maintain oral health. Partner with the patient in achieving oral health goals.

Evaluation

PC.11 Evaluate the effectiveness of the provided services, and modify care plans as needed.
PC.12 Determine the outcomes of dental hygiene interventions using indices, instruments, examination techniques, and patient self-reports as specified in patient goals.
PC.13 Compare actual outcomes to expected outcomes, reevaluating goals, diagnoses, and services when expected outcomes are not achieved.

Competency 5
Professional Growth and Development (PGD)

Dental hygienists must be aware of a variety of opportunities for professional growth and development. Some
opportunities may increase patient access to dental hygiene; others may offer ways to influence the profession and the changing healthcare environment. A dental hygienist must possess transferable skills, e.g., in communication, problem-solving, and critical thinking, to take advantage of these opportunities.

OBJECTIVES:

PGD.1 Pursue career options within health care, industry, education, research, and other roles as they evolve for the dental hygienist.
PGD.2 Develop practice management and marketing strategies to be used in the delivery of oral health care.
PGD.3 Access professional and social networks to pursue professional goals.

**Course Competencies and Objectives**

**By the end of the semester, students will be able to:**

<table>
<thead>
<tr>
<th>Competency 1 Dental Hygiene Profession; Repetitive Stress Injury; Terminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1, C2, C3, C4, C8, C10</td>
</tr>
<tr>
<td><strong>Objective 1.1</strong> State the expectations and assignments required in this course.</td>
</tr>
<tr>
<td><strong>Objective 1.2</strong> Identify his/her own entering expectations of dental hygiene education and of dental hygiene practice.</td>
</tr>
<tr>
<td><strong>Objective 1.3</strong> Discuss a philosophy of patient-centered care, and give examples of patient-hygienist interactions that reflect that philosophy.</td>
</tr>
<tr>
<td><strong>Objective 1.4</strong> Discuss the 3 types of services provided by the clinical dental hygienist.</td>
</tr>
<tr>
<td><strong>Objective 1.5</strong> State the 5 components of the Dental Hygiene Process of Care.</td>
</tr>
<tr>
<td><strong>Objective 1.6</strong> Discuss legal and ethical factors that influence the clinical practice of dental hygiene.</td>
</tr>
<tr>
<td><strong>Objective 1.7</strong> List the 9 dental specialties.</td>
</tr>
<tr>
<td><strong>Objective 1.8</strong> State factors to teach to patients regarding dental hygiene profession and practice.</td>
</tr>
<tr>
<td><strong>Objective 1.9</strong> Identify risk factors associated with Repetitive Stress Injury (RSI).</td>
</tr>
<tr>
<td><strong>Objective 1.10</strong> Demonstrate exercises that will help prevent RSI’s.</td>
</tr>
</tbody>
</table>

Activities/Assignments: Readings-Syllabus, Wilkins Chapter 1, Mosby Chapters 1, 8; PowerPoint presentation; Class discussion

<table>
<thead>
<tr>
<th>Competency 2 Health Data Collection; Medical History; Vital Signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1, C2, C3, C4, C7, C8, C9, C10, HP1, HP2, HP3, HP4, HP5, HP6, PC1, PC2, PC5</td>
</tr>
<tr>
<td><strong>Objective 2.1</strong> Explain the rationale for a complete diagnostic work-up prior to planning dental care.</td>
</tr>
<tr>
<td><strong>Objective 2.2</strong> List the components of a diagnostic work-up.</td>
</tr>
<tr>
<td><strong>Objective 2.3</strong> State the rationale for combining questionnaire and interview techniques to obtain necessary patient information.</td>
</tr>
<tr>
<td><strong>Objective 2.4</strong> Identify responses that necessitate consultation with the clinic dentist and/or physician.</td>
</tr>
<tr>
<td><strong>Objective 2.5</strong> Identify specific conditions that necessitate antibiotic premedication or alteration of treatment.</td>
</tr>
<tr>
<td><strong>Objective 2.6</strong> State the American Heart Association recommendations for antibiotic premedication.</td>
</tr>
<tr>
<td><strong>Objective 2.7</strong> Describe methods of examination.</td>
</tr>
<tr>
<td><strong>Objective 2.8</strong> Identify the importance of the patient’s overall appearance.</td>
</tr>
<tr>
<td><strong>Objective 2.9</strong> List history-update questions to be asked at subsequent appointments.</td>
</tr>
<tr>
<td><strong>Objective 2.10</strong> Explain the use of the Physician’s Desk Reference (PDR).</td>
</tr>
<tr>
<td><strong>Objective 2.11</strong> Recognize the components of personal, medical, and dental histories.</td>
</tr>
<tr>
<td><strong>Objective 2.12</strong> Differentiate between an objective and subjective sign or symptom.</td>
</tr>
<tr>
<td><strong>Objective 2.13</strong> Given various responses to questions, formulate appropriate follow-up questions or procedures to ensure gathering of complete data.</td>
</tr>
</tbody>
</table>
Objective 2.14. Conduct a complete medical health history on a patient. Determine from obtained patient information what, if any, alterations in dental hygiene treatment are necessary.

Objective 2.15. Identify the importance of Section II, Medically Compromised Patient of the MCC Clinic Manual. Determine proper treatment protocol as it relates to patient history and evaluation.

Objective 2.16. Explain the purposes of recording the patient’s vital signs.

Objective 2.17. Describe the procedure for determining and recording the patient’s body temperature.

Objective 2.18. Demonstrate the procedure for determining and recording the patient’s pulse rate.

Objective 2.19. Describe and demonstrate the procedure for determining and recording the patient’s respiratory rate.

Objective 2.20. Demonstrate the procedure for determining and recording the patient’s blood pressure.

Objective 2.21. Identify common errors in blood pressure measurement and state correction for each.

Objective 2.22. Identify the normal ranges for body temperature, pulse rate, respiratory rate and blood pressure and identify those factors that might produce temporary fluctuations in these measurements.

Objective 2.23. Compare and contrast the various classifications of hypertension.

Objective 2.24. Identify the importance of the patient’s overall appearance.

Objective 2.25. Explain the importance of screening for high blood pressure in the dental office.

Objective 2.26. Assess a student partner’s vital signs.

Objective 2.27. Predict possible consequences of failure to determine vital signs.

Objective 2.28. Correctly ascertain the pulse rate on a student partner.

Objective 2.29. Correctly ascertain the respiratory rate on a student partner.

Objective 2.30. Correctly ascertain the blood pressure on a student partner.

Objective 2.31. Correctly document the vital signs on the medical history form of a student partner.

Objective 2.32. Correctly determine if any of the vital signs indicate the need for further evaluation by the clinic dentist and/or a physician.

Activities/Assignments: Readings- Wilkins Chapter 6, 7, 8; Mosby Chapter 12 and 14; MCC Clinic Manual Section II, Medically Compromised Patient; Powerpoint presentation; Class discussion.

Laboratory Activities: Review patient clinical charts to see health data collection, practice vital signs on student partners.

Competency 3 Gingiva; Periodontium

C4, C8, C9, HP5, PC1

Objective 3.1. Describe and recognize normal periodontal tissues.

Objective 3.2. List the features of the periodontal tissues that must be examined for a complete assessment.

Objective 3.3. Describe and recognize the clinical signs of periodontal disease.

Objective 3.4. Draw and label the gingiva and related structures.

Objective 3.5. Describe the classifications of periodontal disease according to the American Academy of Periodontology.

Objective 3.6. Explain and describe the process by which a gingival and/or a periodontal pocket forms.

Objective 3.7. State the etiological factor involved in periodontal disease.

Objective 3.8. Identify the significant factors to the periodontal exam.

Objective 3.9. Differentiate between descriptive gingival terminology including degrees of severity, localized, generalized, marginal, papillary, diffuse.

Objective 3.10. Associate terminology describing color, size, position, contour, consistency, and texture with either healthy or diseased tissue.

Objective 3.11. Compare and contrast healthy and unhealthy tissue.

Activities/Assignments: Reading- Wilkins Chapter 12, 14; Mosby Chapter 16; PowerPoint
<table>
<thead>
<tr>
<th>Competency 4 Plaque Biofilm</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C4, C8, C9, HP4, HP5, PC1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 4.1 Differentiate between the acquired pellicle, bacterial plaque, material alba, and food debris.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 4.2 Describe in detail the structure and formation of plaque</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 4.3 Describe the relationship of plaque to dental caries.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 4.4. Explain the effects of time, pH of plaque and frequency of carbohydrate intake on development of dental caries.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 4.5. Describe the relationship of plaque to periodontal disease.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 4.6. Describe the relationship of plaque to calculus formation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 4.7. State the functions of and describe the techniques of applying disclosing solutions and recording plaque indices.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Activities/Assignments: Readings- Wilkins Chapter 17 and pp. 328-336; PowerPoint presentation; Student project: Plaque Control Record

<table>
<thead>
<tr>
<th>Competency 5 Calculus</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C4, C8, C9, HP4, HP5, PC1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.1 Describe the relationship of scaling, debridement, and polishing to plaque and calculus formation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.2. Distinguish between supramarginal and submarginal calculus.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.3. Explain the general composition of calculus.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.4. Explain the effect of calculus on the gingival tissue and compare the effects of calculus and plaque on the gingival tissues.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.5. Describe the states of calculus formation on the tooth surface.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.6. Describe the modes of attachment of calculus to the tooth.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.7. Describe the relationship of plaque to calculus formation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.8. Describe the process of plaque mineralization.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.9. Explain how to prevent calculus formation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.10. Identify the purpose of a calculus charting and describe the CSI form procedure.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.11. Explain how a tartar-control dentifrice works and describe its effectiveness.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 5.12. Observe the gingival status at site of calculus formation.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Activities/Assignments: Reading- Wilkins Chapter 18 and Nield Chapter 18; PowerPoint presentation; Student projects

<table>
<thead>
<tr>
<th>Competency 6 Extraoral/Intraoral Examination</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C1, C2, C3, C4, C7, C8, C9, HP1, HP2, HP3, HP4, HP5, HP6, PC1, PC2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 6.1. Identify normal structures of the oral cavity and differentiate these from common deviations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 6.2. Describe and identify extraoral and intraoral signs that may be suggestive of HIV/AIDS.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 6.3. Describe and recognize from slides specified common deviations from normal found in the oral cavity and explain the significance of these deviations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 6.4. Analyze assessments gathered from a general appraisal of the patient’s appearance to their significance in dental treatment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 6.5. Give a rationale for performing a general physical assessment of dental patients.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 6.6. State visual assessments associated with each of the following body components and characteristics: weight, gait, limbs, skin, eyes, speech, hands, and mental state.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 6.7. Give rationale for performing a complete head and neck examination.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective 6.8. State the type of assessment used during a head and neck examination.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Objective 6.9. Define terms used to describe visible lesions and other skin and mucous membrane
### Objective 6.10.
Differentiate between each of the following palpation methods: digital, bidigital, manual, bimanual, bilateral, circular compression.

### Objective 6.11.
State those characteristics of palpable lymph nodes which should be assessable and recorded.

### Objective 6.12.
Describe a procedure for performing a visual inspection and palpation of extraoral structures.

### Objective 6.13.
Describe a procedure for performing visual inspection and palpation of intraoral structures.

### Objective 6.14.
Describe significant findings of a head and neck examination using appropriate medical and dental terminology.

### Objective 6.15.
Identify significant findings for any head and neck structure or anatomical area.

### Objective 6.16.
Identify intraoral components of the patient assessment including hard and soft tissue exam, periodontal and radiological assessment.

### Objective 6.17.
For a given structure or anatomical area, identify those findings which might indicate that more detailed examination procedures and further medical testing should be performed.

### Objective 6.18.
Explain the importance of oral cancer self-examination in the prevention regime.

### Objective 6.19.
List the structures to be self-examined and describe the technique for examining the structures.

### Objective 6.20.
Describe a method for educating the patient in self-examination.

### Objective 6.21.
Perform an extraoral/intraoral examination on a student partner.

### Objective 6.22.
Predict possible consequences of failure to perform an extraoral/intraoral examination.

### Objective 6.23.
Follow MCC clinic protocol for extraoral/intraoral (E/I) examination of a student partner.

### Objective 6.24.
Correctly document the findings on the E/I form in the student partner’s chart.

### Objective 6.25.
Correctly determine if any of the findings indicate further need for evaluation by the clinic dentist or a physician.

Activities/Assignments: Readings Wilkins Chapter 10, 13, Mosby Chapters 14 and 15; MCC Clinic Manual; Video: Oral Exam; PowerPoint presentation

Laboratory Activities: Demonstration; Student partner practice

### Competency 7 Dental Charting; Occlusal Classification
C1, C2, C3, C4, C7, C8, C9, HP1, HP2, HP3, HP4, HP5, HP6, PC1, PC2, PC5

#### Objective 7.1.
Following MCC clinic protocol, be able to correctly perform an examination of a student partner’s teeth.

#### Objective 7.2.
Following MCC clinic protocol, accurately perform a dental charting in the student partner’s chart.

#### Objective 7.3.
Correctly determine from the above findings if any further evaluation by the clinic dentist and/or referral to the student partner’s dentist is indicated.

#### Objective 7.4.
Perform a dental charting on a student partner.

#### Objective 7.5.
Peer evaluate another student's dental charting performance.

#### Objective 7.6.
Differentiate between Angle’s Classification of Occlusion.

#### Objective 7.7.
Differentiate between normal occlusion and malocclusion in primary teeth.

#### Objective 7.8.
Describe the various types of facial profile.

#### Objective 7.9.
Describe the various malrelations in groups of teeth.

#### Objective 7.10.
Describe the various mal-positions of individual teeth.

Activities/Assignments: Reading- Wilkins Chapter 15, 16; Mosby Chapter 17, and the MCC Clinic Manual; PowerPoint presentation; Homework assigned.

Laboratory Activities: Clinic Practice, Student partners
### Competency 8: Dental Stains and Discolorations; Coronal Polish; Plaque Control Record

**C1, C2, C4, C7, C8, C10, HP6, PC4**

- **Objective 8.1.** Recognize the categories of tooth discolorations or stains.
- **Objective 8.2.** Recognize the problems of tooth discoloration and how to prevent recurrence.
- **Objective 8.3.** State how discolorations are formed.
- **Objective 8.4.** Individualize proper patient home care regimens, including types of dentifrices for the patient to use.
- **Objective 8.5.** State the rationale and objectives for polishing.
- **Objective 8.6.** State the effects coronal polishing exhibits on the tooth structure.
- **Objective 8.7.** Explain the indications and contraindications for polishing teeth and explain the concept of selective polishing.
- **Objective 8.8.** Distinguish between an abrasive and a polishing agent.
- **Objective 8.9.** Describe the characteristics of abrasive particles and relate the characteristics and methods of application to the abrasion process.
- **Objective 8.10.** List the indications and contraindications for use of various polishing and abrasive agents.
- **Objective 8.11.** Explain why patients should not be provided prophy paste for home use.
- **Objective 8.12.** Describe the recommended method, preparation and application of polishing agents.
- **Objective 8.13.** Distinguish between the different types of handpieces and their attachments.
- **Objective 8.14.** Identify the uses of the rubber polishing cups and bristle brushes.
- **Objective 8.15.** Describe the possible effects on the hard and soft tissues from polishing.
- **Objective 8.16.** Explain the proper technique for polishing with a motor driven instrument.
- **Objective 8.17.** Describe the technique for using floss, tape or strips for polishing proximal surfaces.
- **Objective 8.18.** State the rationale for thorough irrigation following polishing.
- **Objective 8.19.** Identify a Porte polisher and state its indications and use.
- **Objective 8.20.** Demonstrate methods for determining and recording an accurate plaque control record.
- **Objective 8.21.** Communicate the rationale for performing plaque control record.
- **Objective 8.22.** Discuss the advantages and disadvantages of the air powder polisher.
- **Objective 8.23.** Identify advantages and disadvantages of stannous fluoride, sodium fluoride and acidulated phosphate fluoride for topical application.
- **Objective 8.24.** Know the sequence for a fluoride tray application.
- **Objective 8.25.** Understand all items on the "Coronal Polish and Fluoride Application" process evaluation.
- **Objective 8.26.** Define the term “therapeutic procedure” and explain why stain removal is a cosmetic rather than a therapeutic procedure.
- **Objective 8.27.** Define the terms extrinsic and intrinsic stain and give examples of each.
- **Objective 8.28.** Describe the recommended method, preparation, and application of polishing agents.
- **Objective 8.29.** List the possible effects on the hard and soft tissues from polishing.
- **Objective 8.30.** Explain and demonstrate the proper technique for polishing with a motor driven handpiece.
- **Objective 8.31.** State the indications, precautions, and techniques for use of dental floss and polishing strips for polishing proximal surfaces.
- **Objective 8.32.** Demonstrate in a student partner’s mouth the proper technique for polishing and flossing.
- **Objective 8.33.** Summarize the indications and contra-indications of coronal polishing.
- **Objective 8.34.** Discuss the American Dental Hygienist’s Association Position Paper on polishing.
- **Objective 8.35.** Understand all items on the “Coronal Polish process evaluation.

**Activities/ Assignments:** Readings Nield Module 26; Mosby Chapter 32; Wilkins Chapter 19; MCC Clinic Manual; PowerPoint presentation, Class Discussion

**Laboratory Activities:** Hands on demonstration with typodont and student partner practice
### Competency 9 Infection Control

C1, C2, C3, C4, C7, C8, HP1, HP6

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1</td>
<td>Perform proper short scrub / hand wash following MCC Clinic criteria.</td>
</tr>
<tr>
<td>9.2</td>
<td>Perform dental unit disinfection following MCC Clinic criteria.</td>
</tr>
<tr>
<td>9.3</td>
<td>Properly demonstrate use of clinic facilities without breaking the chain of asepsis.</td>
</tr>
<tr>
<td>9.4</td>
<td>Demonstrate competency in asepsis by passing the Asepsis Process Evaluation.</td>
</tr>
<tr>
<td>9.5</td>
<td>Explain the theory of disease transmission and the basic principles of disease transmission in a healthcare setting.</td>
</tr>
<tr>
<td>9.6</td>
<td>Describe the role of personal protective equipment to prevent and reduce the risk of occupational exposure.</td>
</tr>
<tr>
<td>9.7</td>
<td>Describe the role of engineering controls to eliminate or isolate hazards in the dental setting.</td>
</tr>
<tr>
<td>9.8</td>
<td>Identify vaccine strategies to reduce the risk of preventable disease in the dental setting.</td>
</tr>
<tr>
<td>9.9</td>
<td>Discuss occupational exposures to bloodborne pathogens, including prevention, post-exposure management and prophylaxis.</td>
</tr>
<tr>
<td>9.10</td>
<td>Describe transmission based precautions to prevent the spread of infectious disease.</td>
</tr>
<tr>
<td>9.11</td>
<td>Differentiate between OSHA standards and CDC guidelines as they relate to infection control.</td>
</tr>
<tr>
<td>9.12</td>
<td>Differentiate between universal precautions and standard precautions.</td>
</tr>
<tr>
<td>9.13</td>
<td>List infectious diseases relevant to dentistry.</td>
</tr>
<tr>
<td>9.14</td>
<td>Identify infectious hazards in the dental setting.</td>
</tr>
<tr>
<td>9.15</td>
<td>Evaluate an infection control program.</td>
</tr>
<tr>
<td>9.16</td>
<td>Recognize the clinical manifestations of irritant contact dermatitis, allergic contact dermatitis, and immediate allergic reactions, specifically latex allergy.</td>
</tr>
<tr>
<td>9.17</td>
<td>Describe the relationship between hand hygiene and healthcare associated pathogens.</td>
</tr>
<tr>
<td>9.18</td>
<td>Describe normal bacteria flora of the skin.</td>
</tr>
<tr>
<td>9.19</td>
<td>Categorize sanitation, disinfection and sterilization and give examples of when each is appropriate.</td>
</tr>
<tr>
<td>9.20</td>
<td>Define direct and indirect contamination and give examples of each.</td>
</tr>
<tr>
<td>9.21</td>
<td>Debate choices and uses of chemical disinfection/sterilization.</td>
</tr>
<tr>
<td>9.22</td>
<td>Identify the use of Material Safety Data Sheets (MSDS) in the dental setting.</td>
</tr>
<tr>
<td>9.23</td>
<td>Describe the importance of asepsis in the dental setting.</td>
</tr>
</tbody>
</table>

#### Activities/ Assignments
- Readings: Wilkins Chapter 2, 3, 4; Mosby Chapter 7; MCC Clinic Manual; PowerPoint presentation; Discussion; OSAP course
- Laboratory Activities: Demonstration; Clinical practice; Video-If Saliva Were Red

### LAB COMPONENT

Competency 10 Introduction to Clinic: Patient/Operator Positioning; Instrument Grasp
C1, C4, C7, C8, HP6

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1</td>
<td>Locate and identify all listed items when given a list of clinical equipment, supplies, areas, rooms, and references.</td>
</tr>
<tr>
<td>10.2</td>
<td>Assigned to a dental unit, locate and identify listed components of the unit.</td>
</tr>
<tr>
<td>10.3</td>
<td>Assigned to a dental unit, determine the use of all listed switches, levers, and parts of the unit.</td>
</tr>
<tr>
<td>10.4</td>
<td>Identify basic maintenance procedures to improve its longevity and ensure its cleanliness and satisfactory appearance when given any of the common components of the dental unit.</td>
</tr>
<tr>
<td>10.5</td>
<td>Working with the contents of the student’s instrument kit, correctly identify and code (with color bands and/or engraver) all items.</td>
</tr>
</tbody>
</table>
**Objective 10.6.** State and explain the rationale for positioning of the: patient; operator; assistant; unit; and other equipment.

**Objective 10.7.** Describe and demonstrate patient and operator positioning in relation to basic zones of clinical operation.

**Objective 10.8.** Discuss negative consequences of improper patient and/or operator positioning.

**Objective 10.9.** State the definition of ergonomics and discuss the positive and negative physical factors that affect the practice of dental hygiene.

**Objective 10.10.** Describe and demonstrate:
- a. a standard pen grasp;
- b. a modified pen grasp;
- c. a palm grasp.

**Objective 10.11.** State the purposes and rationale for a modified pen grasp.

**Objective 10.12.** State the purposes and rationale for a palm grasp.

**Objective 10.13.** State the function served by each finger in the instrument grasp.

**Objective 10.14.** Correctly demonstrate a modified pen grasp.

**Objective 10.15.** Correctly demonstrate a palm grasp.

**Objective 10.16.** Predict possible consequences of incorrect instrument grasp.

**Activities/Assignments:** Reading- Nield Module 1, 2, 3; Mosby Chapter 8; Wilkins Chapter 5; PowerPoint presentation; Demonstration; Complete Modules 1, 2, 3 in Nield

**Laboratory Activities:** Clinic Practice with instrument kit, typodont

---

**Competency 11 Finger Rest; Fulcrum; Mouth Mirror; Instrument Design and Classification**

**C1, C3, C4, C7, C8, HP6**

- **Objective 11.1.** Define and list the functions of a finger rest and fulcrum.
- **Objective 11.2.** State rationale for a solid fulcrum.
- **Objective 11.3.** Name 2 types of fulcrums.
- **Objective 11.4.** Describe and demonstrate the recommended technique for a fulcrum.
- **Objective 11.5.** Establish an appropriate fulcrum in each treatment area of the mouth while maintaining neutral positioning of the wrist and fingers.
- **Objective 11.6.** Correctly name the parts of the mouth mirror.
- **Objective 11.7.** Name, define, and demonstrate the uses of a mouth mirror.
- **Objective 11.10.** Demonstrate the use a mouth mirror in each treatment area of the mouth.
- **Objective 11.11.** Describe two measures that assure patient comfort while you use the mouth mirror.
- **Objective 11.12.** Demonstrate methods of preventing condensation in order to maintain clear visibility while using the mouth mirror.
- **Objective 11.13.** Demonstrate retraction techniques for cheeks and lips.
- **Objective 11.14.** Correctly demonstrate indirect vision in all treatment areas of the mouth.
- **Objective 11.15.** Integrate instrument grasp, finger rests, and use of the mouth mirror in continued correct patient/operator positioning to view and access each treatment area of the mouth.
- **Objective 11.16.** Identify the classification, design name, and design number of any dental hygiene instrument.
- **Objective 11.17.** Identify design characteristics of instrument handles and shanks, and discuss how those design features relate to the instruments.
- **Objective 11.18.** Identify the face, back, lateral surfaces, cutting edges, and toe or tip of the working end of an instrument.
- **Objective 11.19.** Identify instruments by their classification.
- **Objective 11.20.** Determine the intended use of an instrument by evaluating its design features and classification.
Activities/Assignments: Reading- Nield Module 4, 5, 6, 7; PowerPoint presentation; Demonstration; Complete modules 4, 5, 6, 7 in Nield.
Laboratory Activities: Clinic Practice with instrument kit and typodont; introduction to instrument design.

Competency 12 Instrument Stroke
C3, C4, C7, C8, HP6

Objective 12.1. Define and demonstrate technique elements of the instrumentation stroke:
   a. adaptation;
   b. angulation;
   c. motion activation;
   d. the handle roll.

Objective 12.2. Compare and contrast four types of instrumentation strokes:
   a. the placement stroke
   b. the assessment stroke
   c. the calculus removal stroke
   d. the debridement stroke

Objective 12.3. Demonstrate the strokes on a manikin.

Objective 12.4. Identify a curet and locate the components of the blade.

Objective 12.5. Explain why a curet is the instrument of choice for subgingival scaling.

Objective 12.6. Demonstrate the proper blade to tooth relationship for scaling, using a pull stroke.

Objective 12.7. Describe and demonstrate the correct adaptation of a bladed instrument.

Objective 12.8. Predict the results of poor adaptation of a bladed instrument.

Objective 12.9. Identify a sickle scaler and locate the components of the blade.

Objective 12.10. Distinguish a curet from a sickle scaler.

Objective 12.11. State the uses and limitations of a sickle scaler.

Objective 12.12. Demonstrate proper use of both a curet and sickle scaler while employing correct patient/operator positioning and the basic principles of instrumentation on a manikin.

Activities/Assignments: Reading-Nield Module 8, 9, 10; PowerPoint presentation; Demonstration; Complete modules 8, 9, 10 in Nield.
Laboratory Activities: Demonstration; Clinic Practice typodont

Competency 13 Explorers
C3, C4, C8, HP6

Objective 13.1. Identify the two explorers in your instrument kit used for the oral inspection and periodontal evaluation.

Objective 13.2. State the uses of each explorer.

Objective 13.3. Identify the parts of each explorer.

Objective 13.4. Identify the oral areas and conditions for which each explorer is used.

Objective 13.5. On a manikin, demonstrate proper adaptation of each explorer to the tooth surfaces on which it is used.

Objective 13.6. Compare and contrast results of a calculus assessment with the 2 types of explorers in your kit.

Objective 13.7. Assess deposits and their locations on a student partner through the use of an explorer.

Objective 13.8. Using the appropriate explorer, inspect a student partner’s dentition for caries.

Activities/Assignments: Reading- Nield Module 12 and Wilkins Chapter 13; Powerpoint presentation; Demonstration; Complete module 12 in Nield.
Laboratory Activities: Demonstration; Clinic Practice on typodonts and student partners
### Competency 14 Sickle Scalers

C3, C4, C8, HP6

- **Objective 14.1.** Identify the design characteristics of sickle scalers.
- **Objective 14.2.** List the uses of sickle scalers.
- **Objective 14.3.** Explain why the lower shank of a sickle scaler should be tilted toward the tooth surface being instrumented to obtain correct angulation.
- **Objective 14.4.** Using a sickle scaler, demonstrate correct adaptation and use of calculus removal strokes on the anterior teeth.
- **Objective 14.5.** Using a sickle scaler, demonstrate correct adaptation and use of calculus removal strokes on the posterior teeth.

### Activities/Assignments:
- Reading: Nield Module 14; PowerPoint presentation; Class Discussion; Demonstration; Complete module 14 in Nield
- Laboratory Activities: Demonstration; Clinic Practice on typodonts and student partners

### Competency 15 Universal Curets

C3, C4, C8, HP6

- **Objective 15.1.** Identify the design characteristics of universal curets.
- **Objective 15.2.** Discuss the advantages and limitations of the design characteristics of universal curets.
- **Objective 15.3.** List the uses of universal curets.
- **Objective 15.4.** Describe how the clinician can use visual clues to select the correct working-end of a universal curet on anterior and posterior teeth.
- **Objective 15.5.** Explain why the lower shank of a universal curet should be tilted slightly toward the tooth surface being instrumented to obtain correct angulation.
- **Objective 15.6.** Using a universal curet, demonstrate correct adaptation and use of calculus removal strokes on the posterior teeth.
- **Objective 15.7.** Using a universal curet, demonstrate horizontal calculus removal strokes at the distal line angles of posterior teeth and at the midlines on the anterior teeth.

### Activities & Assignments:
- Reading: Nield Module 15; PowerPoint presentation; Demonstration; Complete module 15 in Nield
- Lab Activities: Demonstration; Clinic Practice on typodonts and student partners

### Competency 16 Universal Curets

C3, C4, C8, HP6

- **Objective 16.1.** Identify the design characteristics of area-specific curets.
- **Objective 16.2.** Discuss the advantages and limitations of the design characteristics of area-specific curets.
- **Objective 16.3.** List the uses of area specific curets.
- **Objective 16.4.** Describe how the clinician can use visual clues to select the correct working-end of an area specific curet on anterior and posterior teeth.
- **Objective 16.5.** Explain why the lower shank of a universal curet should NOT be tilted slightly toward the tooth surface being instrumented to obtain correct angulation.
- **Objective 16.6.** Using an area-specific curet, demonstrate correct adaptation and use of calculus removal strokes on the posterior teeth.
- **Objective 16.7.** Using an area-specific curet, demonstrate horizontal calculus removal strokes at the distal line angles of posterior teeth and at the midlines on the anterior teeth.
- **Objective 16.8.** Given any sickle scaler, universal curet or area-specific curet, identify its function and where it should be used on the dentition.
- **Objective 16.9.** Discuss the advantages and limitations of the design characteristics of area-specific curets.

### Activities & Assignments:
- Reading: Nield Module 16; PowerPoint presentation; Demonstration;
Complete module 16 in Nield
Lab Activities: Demonstration; Clinic Practice on typodonts and student partners

Competency 17 Periodontal Probes
C3, C4, C8, HP6

Objective 17.1. Identify the probe found in your instrument kit, and state the primary use.
Objective 17.2. Give examples of different markings on various probes.
Objective 17.3. Compare and contrast the use of a PSR probe with a traditional probe.
Objective 17.4. On a manikin, demonstrate correct insertion of the periodontal probe.
Objective 17.5. Describe tactile variations encountered when using the probe.
Objective 17.6. On a manikin, demonstrate the “bobbing” or “walking” stroke used with the probe.
Objective 17.7. On a manikin, demonstrate correct angulation of the probe when walking the probe circumferentially around the tooth.
Objective 17.8. Correctly determine the 6 probing depth measurements taken on a tooth.
Objective 17.9. On a manikin, demonstrate an efficient sequence used in probing.
Objective 17.10. Compare and contrast results of gingival and/or periodontal assessment with and without the use of a probe.
Objective 17.11. Using a probe, accurately assess the periodontal status of a student partner.

Activities/Assignments: Reading- Nield Module 11 and Wilkins Chapter 13; Powerpoint presentation; Demonstration; Complete module 11 in Nield
Laboratory Activities: Demonstration; Clinic Practice on typodonts and student partners

### Current Course Textbook, Materials and Equipment

<table>
<thead>
<tr>
<th>Current Textbook(s)</th>
<th>Title</th>
<th>Author(s)</th>
<th>Publisher</th>
<th>ISBN#</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title</strong></td>
<td>Clinical Practice of the Dental Hygienist, 10th edition</td>
<td>Esther M. Wilkins</td>
<td>Lippincott, William &amp; Wilkins</td>
<td>978-0-7817-6322-6</td>
</tr>
<tr>
<td><strong>Author(s)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Publisher</strong></td>
<td></td>
<td></td>
<td>Lippincott, William &amp; Wilkins</td>
<td></td>
</tr>
<tr>
<td><strong>ISBN#</strong></td>
<td></td>
<td></td>
<td>978-0-7817-6322-6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author(s)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Publisher</strong></td>
<td></td>
<td></td>
<td>Mosby Elsevier</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title</th>
<th>Fundamentals of Periodontal Instrumentation, 6th ed.</th>
<th>Nield-Gehrig</th>
<th>Lippincott, Williams &amp; Wilkins</th>
<th>978-0-7817-6992-1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author(s)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Publisher</strong></td>
<td></td>
<td></td>
<td>Lippincott, Williams &amp; Wilkins</td>
<td></td>
</tr>
<tr>
<td><strong>ISBN#</strong></td>
<td></td>
<td></td>
<td>978-0-7817-6992-1</td>
<td></td>
</tr>
</tbody>
</table>

### Proposed New Course Textbook, Materials and Equipment

Effective Semester/Year
- Fall
- Spring
- Summer

Software/Equipment

Microsoft Word, PowerPoint & Internet Access; Web enhanced by Angel Instrument Kit, Scrubs, Clinic Shoes, Personal Protective Equipment, Stethoscope, Sphygmomanometer, Red and Blue Pencils, Calculator, Clinic Forms, hand-held mirrors, oversized tooth models and hygiene instruments

MCC Form EDU 0007 (rev. 102212)
<table>
<thead>
<tr>
<th>Textbook(s)</th>
<th>Title</th>
<th>Author(s)</th>
<th>Publisher</th>
<th>ISBN #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>edition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software/</td>
<td>Title</td>
<td>Author(s)</td>
<td>Publisher</td>
<td>ISBN #</td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>