

Coleman College for Health Sciences Division Dental Assisting Department

http://www.hccs.edu/dental-assistant

DNTA 1245: Preventive Dentistry | Lecture/Lab | #15796, #15797

Fall 2019 | 16 Weeks (8.26.2019-12.15.2019)
In-Person | Coleman Bldg. 576/567 | TTh 2:00 p.m. - 2:50 p.m.;
M 10:00 a.m. - 10:50 a.m. or W 10:00 a.m. - 10:50 a.m.
2 Credit Hours | 32 hours per semester

Instructor Contact Information

Instructor: Kay Jukes, BS, CDA, RDA Office Phone: 713-718-7351

Office: Coleman Bldg. Rm. 519 Office Hours: M-R 9:30-10:45 a.m. HCC Email: kay.jukes@hccs.edu Office Location: Coleman Bldg. Rm. 519

Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear the concerns and just to discuss course topics.

Instructor's Preferred Method of Contact

Preferred method of contact is email. I will respond to emails within 24 hours Monday through Friday; I will reply to weekend messages if available otherwise on Monday mornings.

What's Exciting About This Course

This course will focus on the methods of preventive care in dentistry. During this course you will be introduced to the methods and materials available to help protect your teeth from cavities. This will include dental floss, toothbrushes, toothpaste and fluoride. We will also focus on pit and fissure sealants and coronal polishing.

My Personal Welcome

Welcome to Preventive Dentistry — I am so excited to share my love of the dentistry profession with you. While I did not start out in dentistry – I got here as fast as I could and still have a passion for it today!

Prerequisites and/or Co-Requisites

The minimum requirements for enrollment in DNTA 1401 include being TSI "Complete" in Reading, Writing and Math Or completion with a minimum grade of C in INRW 0420 and MATH 0309 and completion of the prerequisite course, HPRS 1201, with a grade of B or better. Please carefully read and consider the repeater policy in the HCCS_Student_HCCS_Student_HANdbook.

Instructional Materials

Textbook Information

The textbook listed below is *required* for this course.

Bird & Robinson, Modern Dental Assisting, 12th ed., Saunders Elsevier, 2018.

REFERENCE TEXTBOOKS:

Garcia-Godoy & Harris, <u>Primary Preventive Dentistry</u>, Pearson Prentice Hall, 8th ed., 2014.

The textbook is found at the <u>HCC Bookstore</u>. You may either use a hard copy of the book, or rent the e-book from Pearson. Order your book here: <u>HCC Bookstore</u>

Other Instructional Resources

Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the <a href="https://example.com/hCC-utoring-com/

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at http://library.hccs.edu.

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at http://www.hccs.edu/resources-for/current-students/supplemental-instruction/.

Course Overview

DNTA 1245 – The study of nutrition and preventable dental disease and community dental health.

Core Curriculum Objectives (CCOs)

DNTA 1245- Preventive Dentistry will address the following core objectives:

- *Critical Thinking*: Students will differentiate between the different materials utilized in dentistry. This will include being able to correctly choose and manipulate requested materials. Students will be assessed with peer and instructor competencies.
- **Empirical and Quantitative Skills**: Students will manipulate the various dental materials to resulting in the correct consistency and final product. Students will be assessed with peer and instructor competencies.
- **Teamwork:** Students will participate in groups or with a partner during laboratory sessions. They will show respect to others as well as listen to and consider their partners ideas and work well with all teammates.
- **Personal Responsibility**: Students will actively participate in class, ask questions and complete and submit all assignments by the due date. They will adapt easily to different modes of instruction and different types of assignments.

Program Student Learning Outcomes (PSLOs)

Upon completion of this course the student will be able to:

- 1. define and state the goals of preventive dentistry.
- 2. explain the steps involved in each method of prevention and personal oral hygiene.
- 3. explain the importance of fluoride and its role in preventive dentistry.
- 4. name the basic nutrients necessary for good health.
- 5. describe the basic functions of each of the basic nutrients.
- 6. state the relationship between diet and dental health.
- 7. explain the steps involved in nutritional analysis of a dental patient.
- 8. outline the steps involved in diet and nutritional counseling of dental patients.
- 9. create a color brochure to be given to patients describing proper flossing and toothbrushing methods

Course Student Learning Outcomes (CSLOs)

UNIT 1 INTRODUCTION TO DENTAL MATERIALS

The student will be able to:

- 1. Identify the role of ADA specification concerning dental materials.
- 2. Describe the history of dental materials.
- 3. Name the early important developers of dental materials.
- 4. Describe the primary factors that adversely affect dental materials.
- 5. Differentiate between the classes of restorative materials.
- 6. Define the following terms: adhesion, cohesion, stress, strain, elasticity, ultimate strength, ductility, malleability, flow, creep, toughness, hardness and viscosity.
- 7. Discuss the criteria that affect the manipulation of dental materials.
- 8. Describe the use, operation, care and safety of the following items: vibrators, lathe, model trimmer, and bench engines.

UNIT 2 GYPSUM

The student will be able to:

- 1. Discuss the uses of gypsum products.
- 2. Differentiate between three classifications of gypsum products.
- 3. Identify the composition and crystalline structure of dental stone and dental plaster and compare the two.
- 4. Describe the factors affecting the final strength and accuracy of gypsum.
- 5. List six factors that influence the setting time of gypsum.
- 6. Demonstrate correct manipulation of gypsum materials in terms of water/powder ratio and spatulation techniques.
- 7. Describe correct storage methods and their importance.
- 8. Describe and demonstrate the steps involved in constructing a cast.

UNIT 3 VARNISHES, CAVITY LINERS AND BASES

The student will be able to:

- 1. Identify types of cavity liners, varnishes and bases.
- 2. List uses of liners and varnishes.
- 3. Describe the composition of cavity liners and bases.
- 4. Define the term's cavity liner, varnishes and bases.
- 5. Describe and demonstrate the manipulation of cavity liners.
- 6. Describe and differentiate in terms of characteristics, composition and uses in dentistry of cavity liners, varnishes and bases.

UNIT 4 DENTAL CEMENTS

The student will be able to:

- 1. Classify dental cements according to their composition.
- 2. Identify the general uses of dental cements.
- 3. Demonstrate the correct procedure in manipulating and placing a temporary restoration.
- 4. Identify and compare uses, composition characteristics of the following cements:
 - a. Phosphate cements
 - b. Zinc oxide and eugenol cement
 - c. Polycarboxylate cement
 - d. Resin cement
 - e. Glass ionomer cement
- 5. Demonstrate proficiency in the manipulation of the following cements:
 - a. Phosphate cements
 - b. Zinc oxide and eugenol cement
 - c. Polycarboxylate cement
 - d. Resin cement
 - e. Glass ionomer cement

UNIT 5 RESINS

The student will be able to:

- 1. Define the term resin.
- 2. Identify the uses of resin materials.
- 3. Classify resin restorative material.
- 4. Identify and compare uses, composition and characteristics of unfilled resins and composite resins.
- 5. Demonstrate the correct manipulation of unfilled and composite resins.
- 6. Describe the acid etch technique.

UNIT 6 AMALGAM

The student will be able to:

- 1. Identify the following terms relating to metals in dentistry:
 - a. Alloy
 - b. Amalgam
 - c. Corrosion
 - d. Tarnish
 - e. Amalgamated
 - f. Triturated
- 2. Describe the composition of alloy for dental amalgam.
- 3. Identify the purpose of each component of alloy used for dental amalgam.
- 4. Identify the importance of each of the following: mercury/alloy ratio and setting reaction.
- 5. Describe the importance of mercury hygiene.

- 6. Identify the purpose and importance of complete condensation of dental amalgam.
- 7. State reasons for the finishing and polishing of amalgam restorations.
- 8. Demonstrate proficiency in the manipulation and care of dental amalgam.

UNIT 7 DENTAL GOLDS

The student will be able to:

- 1. List the uses of gold in dentistry.
- 2. Name three types of dental gold.
- 3. Describe the manipulation of direct gold filling.

UNIT 8 IMPRESSION MATERIALS

The student will be able to:

- 1. Classify dental impression materials into three distinct groups.
- 2. Define and differentiate between the following terms:
 - a. Colloid
 - b. Hydrocolloid
 - c. Sol
 - d. Gel
 - e. Reversible hydrocolloid
- 3. Identify (5) types of impression trays.
- 4. Compare and describe reversible and irreversible hydrocolloid impression materials in terms of their composition, characteristics and uses.
- 5. Discuss impression compound and zinc oxide-eugenol impression pastes in terms of their composition, characteristics and uses.
- 6. Identify and compare three types of Elastomeric impression materials in terms of their composition, characteristics and uses.
- 7. Describe storage procedures for each type of impression material discussed.
- 8. Demonstrate correct manipulation technique for each of the following impression materials.
- 9. Describe the importance of proper manipulation of impression materials.

UNIT 9 WAXES

The student will be able to:

- 1. List the different classifications of waxes and which types fall into which categories.
- 2. Identify the different types of waxes.
- 3. Describe storage procedures for each type of wax.
- 4. Discuss uses for the waxes and be able to demonstrate the various uses in the lab.

Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time may be required for laboratory practice. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments
- Participating in class activities

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as a guide.

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- Provide the course outline and class calendar that will include a description of any special projects or assignments
- Arrange to meet with individual students as required

As a student, it is your responsibility to:

- Attend class
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
 - Be aware of and comply with academic honesty policies in the HCCS Student Handbook

Assignments, Exams, and Activities

Exams

There will be 5 exams – 100 points each - in the course with the lowest one dropped. Examination questions will be taken from reading assignments, handouts, lecture material and laboratory material.

Individuals arriving late for an exam will not be given additional time for the exam. Also, if any student has completed the exam and left the room prior to arrival of the late student, the late student **will not** be allowed to take the exam.

Exams will be returned the next class period. All exams are kept in the instructor's office.

In-Class Activities

LAB REQUIREMENTS:

Students will be required to complete two (2) laboratory competencies – 100 points each. These will include, coronal polishing and pit and fissure sealants. Both of these must be completed with an 85 or higher or the student will rebut are not limited to, study models, cement mixing and impression material mixing.

QUIZZES

Students may be given quizzes in class or in lab. Quizzes will be worth 100 points each and will be averaged at the end of the semester for one grade. It is advised to arrive to class on time since guizzes will generally be administered at the beginning of class.

DAILY LAB GRADE

Students will receive a daily grade in each lab session. This includes but is not limited to, dress code, punctuality, and cleanliness. The grading form will be discussed the first day of lab. Daily lab grades count for 100 points and all will be averaged together and count as 1 quiz grade.

Finals

There will be a written comprehensive final that will be worth 200 points.

Grading Formula

POINTS MAY BE EARNED BY:

Major Examinations (4 exams) 300 points

Possible 100 points each exam (lowest grade will be dropped in lieu of make-up exams)

Daily quizzes (average of all) 100 points

Daily Lab Grade (averaged as 1 quiz grade)

Brochure 100 points

Lab Competencies 200 points

Final Exam 200 points

900 points

GRADING SCALE:

To earn an:

A - accumulate 810-900 points

B - accumulate 720-809 points

C - accumulate 630-719 points

D – accumulate 540-629 points

F - accumulate 0-539 points

NOTE: Students must achieve 630 points or more to successfully complete this course.

*****NOTE---any lab projects turned in late will not be accepted; you will receive a 0 for the project.

Individuals arriving late for an exam will not be given additional time for the exam. Also, if any student has completed the exam and left the room prior to arrival of the late student, the late student will **not** be allowed to take the exam.

HCC Grading Scale can be found on this site under Academic Information: http://www.hccs.edu/resources-for/current-students/student-handbook/

Course Calendar

| <u>DATE</u> | TOPIC | <u>ASSIGNMENT</u> |
|-------------|--|------------------------|
| Week #1 | Introduction Preventive Dentistry Disclosing Solutions | CH 1 PPD |
| Lab | | |
| Week #2 | Development of Plaque Development of Caries Brushing and Flossing | CH 13 MDA |
| Lab | | |
| Week #3 | Periodontal Disease TEST #1 | CH 14 MDA |
| Lab | Charting/Flossing | |
| Week #4 | Toothbrushing Personal Oral Hygiene Charting/Flossing | CH 15 MDA |
| Lab | | |
| Week #5 | Dentrifices, Mouth Rinses Dentrifices, Mouth Rinses Sealant Manipulation | CH 15 MDA |
| Lab | | |
| Week #6 | Water Fluoridation Topical Fluoride Sealant Manipulation | CH 8 PPD CH 9 PPD |
| Week #7 | Pit and Fissure Sealants TEST #2 Sealant Application | CH 59 MDA CH 10 PPD |
| Lab | | |
| Week #8 | Caries Activity Sugars & Other Sweeteners Sealant Application | CH 12, 14 PPD |
| Lab | | |
| Week #9 | Nutrition Nutrition Sealant Application | CH 16 PPD |
| Lab | | |
| Week #10 | Human Motivation Human Motivation | |
| Lab | Coronal Polishing | |
| Week #11 | TEST #3 Dental Public Health/Brochures CH 17 PPD | |
| Lab | Coronal Polishing | |

Week #12 Dental Public Health/Table CH 18 & 19 PPD

Clinics

Lab Coronal Polishing

Week #13 School Based Programs CH 20 PPD

Lab Coronal Polishing

Week #14 Compromised Patients

Geriatric

Lab Brochures

Week #15 Hospital Settings CH 22 PPD

TEST #4

Lab Brochures

Week #16 FINAL EXAM

Syllabus Modifications

The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

Instructor's Practices and Procedures

Missed Assignments

There are no make-up exams due to the lowest grade being dropped. Failure to turn in a lab assignment by the required date will result in a "0" being awarded. There are also no make-up quizzes and blank copies will not be provided if a quiz is missed.

Academic Integrity

A student may be subject to immediate dismissal for violation of academic standards (plagiarism, cheating, coercion) as outlined in the Dental Assisting Student Handbook.

Any student expelled from the Dental Assisting Program will not permitted readmission.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance):

http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/

Attendance Procedures

Students are considered absent if they are more than 15 minutes late to class. If a student is absent, he or she will not be allowed to take any missed quiz or exam, so please do not ask!

Students absent from a course for more than 12.5% of the total hours of instruction, which includes labs, will be administratively dropped.

Students who are late will not be allowed to take an exam once the exam if completed and turned in by another student, even if before the 15 minute deadline.

Students are required to personally contact the classroom/lab instructor when they will be tardy or absent.

Student Conduct

Instructor's Course-Specific Information

Students shall show respect to faculty, staff and peers. This applies whether in the classroom, laboratory, clinic or on campus.

Electronic Devices

All cell phones are to be on silent and in a backpack or purse. Phones are not allowed on the desk top or inside a desk. Lap top computers may be utilized for note taking however viewing social media is not allowed. If a faculty member sees you looking at social media you will be asked to shut down the computer. Smart watches are not allowed to be worn on exam days.

HCC Policies

Here's the link to the HCC Student Handbook http://www.hccs.edu/resources-for/current-students/student-handbook/ In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search
- Childcare
- disAbility Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services
- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

EGLS³

The EGLS³ (Evaluation for Greater Learning Student Survey System) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. -EGLS³ surveys are not offered during the Summer semester due to logistical constraints.

http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/

Campus Carry Link

Here's the link to the HCC information about Campus Carry: http://www.hccs.edu/departments/police/campus-carry/

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go to HCC Eagle ID and activate it now. You may also use Canvas Inbox to communicate.

Housing and Food Assistance for Students

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

Office of Institutional Equity

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement (http://www.hccs.edu/departments/institutional-equity/)

disAbility Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term conditions, mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to http://www.hccs.edu/support-services/

Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and

parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271
Houston, TX 77266-7517 or lnstitutional.equity@hccs.edu
lnstitutional-equity/title-ix-know-your-rights/

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/

Department Chair Contact Information

Kay Jukes, BS, CDA, RDA – kay.jukes@hccs.edu, 713-718-7351.