

**MARTIN COMMUNITY COLLEGE**  
**COURSE SYLLABUS**  
**Semester/Year: Spring 2011**

<b>COURSE NUMBER:</b> DEN 103 (5W1)	<b>INSTRUCTOR:</b> Susan Cutler
<b>COURSE TITLE:</b> Dental Science	<b>OFFICE NO:</b> Building 4, Room 29
<b>CREDIT HOURS:</b> 2	<b>OFFICE/VIRTUAL HOURS:</b> M-8-10, 12-4, T-OJT, W-8-10, 12-4, Thur-OJT, Fri- 8-10, 1-4
<b>CONTACT HRS/WK:</b> 2	<b>PHONE NO:</b> 252-789-0239
<b>PREREQUISITES:</b> ENG 090, MAT 070, RED 090	<b>FAX:</b> 252-792-0826
<b>COREQUISITES:</b> None	<b>E-MAIL:</b> scutler@martincc.edu

**COURSE DESCRIPTION:**

This course is a study of oral pathology, pharmacology, and dental office emergencies. Topics include oral pathological conditions, dental therapeutics, and management of emergency situations. Upon completion, students should be able to recognize abnormal oral conditions, identify classifications, describe actions and effects of commonly prescribed drugs, and respond to medical emergencies.

**PROGRAM LEARNING OUTCOMES:**

1. Demonstrate appropriate dental assisting techniques and skills for assisting in a dental office.
2. Perform with accuracy clinical examinations and radiographic and laboratory procedures using appropriate chairside procedures and infection control.
3. Explain chairside procedures, infection control protocol, and radiographic procedures.

**COURSE LEARNING OUTCOMES:**

1. Identify predisposing factors, preventive measures, and clinical manifestations for common medical emergencies in the dental office.
2. Assist in administering immediate and appropriate emergency care.
3. Monitor and maintain the emergency drug kit and other emergency equipment.

Other Objectives:

1. Discuss the basic terminology related to pharmacology.
2. Identify common drug sources and current drug publications.
3. Describe the properties, dosage, therapeutic effects, methods of administration, indications and contraindications of commonly used drugs.
4. Describe the processes of drug absorption, distribution, metabolism, and elimination.
5. Describe state and federal drug legislation and demonstrate accurate prescription preparation.
6. Recognize and use common descriptive terminology to facilitate the study of oral pathology.
7. Describe the process of inflammation and repair.
8. Describe the developmental abnormalities common to the oral structures.
9. Describe diseases of the oral tissues which will include viral, bacterial, fungal, and benign and malignant neoplasms.

**LEARNING OBJECTIVES:**

Upon completion of this course the student will be able to demonstrate proficiency in these clinical dental assisting procedures:	WEEK ALLOCATED	TOTAL TIME ALLOCATED
1. Identify predisposing factors, preventive measures, and clinical manifestations for common emergencies in the dental office.	Week 1	
2. Describe the process of inflammation and repair.	Week 2, 3, 12	
3. Describe the properties, dosage, therapeutic effects, indications and contraindications of common used drugs.	Week 4, 6, 8, 11	
4. Describe the developmental abnormalities common to the oral structures.	Week 5, 7, 9	
5. Identify common drug sources and current drug publications.	Week 7, 15	
6. Describe state and federal drug legislation and demonstrate accurate prescription preparation.	Week 13, 14	
7. Recognize and use common descriptive terminology to facilitate the study of oral pathology.	Week 1, 10	
8. Discuss the basic terminology related to pharmacology.	Week 11, 13, 14	
9. Monitor and maintain the emergency drug kit and other emergency equipment.	Week 13, 14, 15	
10. Assist in administering immediate and appropriate emergency care.	Week 14, 15	
11. Describe the diseases of the oral tissues which will include viral, bacterial, fungal, benign, and malignant neoplasms.	Week 7, 15, 16	

**LEARNING EXPERIENCES EVALUATION/COMPETENCY PROCEDURE:**

1. The student submits a Learning Experience Report (see addendum A) after completing each learning experience.
2. The student and Dental Assistant Director review each learning experience report to assess the student's knowledge level.
3. The Dental Assistant Director documents the student's knowledge level using a 1-4 scale (see Evaluation Scale below).
4. The student demonstrates the learning experience to show proficiency level to the Dental Assistant Director.
5. The Dental Assistant Director documents the student's proficiency on the 1-4 scale.
6. The student and Dental Assistant Director sign and date the learning experience evaluation form using ink.

**LEARNING EXPERIENCE EVALUATION/COMPETENCY SCALE:**

- 1 Student demonstrates excellent knowledge and skills and can teach other students
- 2 Student demonstrates excellent knowledge and skills
- 3 Student demonstrates expected knowledge and skills
- 4 Student fails to demonstrates expected knowledge and skills

**ASSESSMENT INSTRUMENTS:**

- Learning Experience Reports and other written assignments
- Formal and informal observations by the Dental Assistant Director
- Group and individual demonstrations and/or presentations
- Group and individual discussion and work sheets
- Attendance, assignments, and other records

**REQUIRED TEXTBOOKS:** Phinney, D., Halstead, J. (2007) *Delmar's dental assisting: A comprehensive approach*. (3<sup>rd</sup> edition) Clifton Park, NY: Thomson Delmar Learning.

**SUPPLEMENTAL RESOURCES:**

Den 103 Course Packet

**LEARNING/TEACHING METHODS:**

1. Lecture
2. Lab
3. Class discussion
4. Videos
5. Assigned Reading
6. Outside Reading Assignments

**ASSESSMENTS/METHODS OF EVALUATION:**

A student must maintain a "C" average to satisfactorily complete this course.

Grading will be on the basis of homework and test results that may include multiple choice, matching, true/false, short answer and/or essay questions.

Quizzes	30%
Homework and Outside Reading Assignments	10%
Tests	50%
Exam	10 %

**GRADING POLICY:** The following 7 point grading scale will be used by the dental department.

100-93	A
92-85	B
84-78	C
77-70	D
Below 70	F

**COURSE OUTLINE:**

Pharmacology

- I. Introduction to Pharmacology
  - A. Drug terminology
  - B. Drug sources
  - C. Legislation
  - D. Drug schedules
  - E. Drug names
  - F. Publications
  - G. Categories of use
  - H. Drug preparation
  - I. Drugs action/interactions
  - J. Concomitant administration of drugs
  - K. Dosages

- L. Drug measurements
- M. Prescription writing

II. Drug Commonly Prescribed by a Dentist

- A. Antibiotics
- B. Analgesics
- C. Anxiety reducing drugs

III. Tranquilizers and Antidepressants

**Dental Office Emergencies**

I. Introduction to Dental Office Emergencies

- A. Types of emergencies
- B. Factors that increase/decrease likelihood of occurrence
- C. Responsibility of dental team member
- D. Evaluating medical/dental health history
- E. Emergency drug kit
- F. Emergency routine

II. Common Dental Office Emergencies

- A. Convulsive disorders
- B. Cardiovascular emergencies
- C. Allergic reactions
- D. Respiratory emergencies
- E. Diabetes Mellitus

**Pathology**

I. Introduction to Oral Pathology

- A. Descriptive terminology
- B. Categories of lesions
- C. Inflammation and repair

II. Developmental Abnormalities

- A. Jaw
- B. Face
- C. Tongue
- D. Teeth
- E. Salivary glands

III. Diseases of the Oral Tissues

- A. Viral infections
  - 1. Herpetic infections
  - 2. HIV
  - 3. Chicken pox
  - 4. Measles (Koplik= spots)
- B. Bacteria infection
  - 1. Aphthous stomatitis
  - 2. ANUG (acute necrotizing ulcerative gingivitis)
  - 3. Syphilis
  - 4. Pericoronitis
  - 5. Osteomyelitis
  - 6. Periodontal disease
  - 7. Caries

- C. Fungal infections
  - D. Nonspecific infections
    - 1. Pyogenic granuloma
    - 2. Hyperplasia
- IV. Neoplasms
- A. Benign
    - 1. Fibroma
    - 2. Papilloma
    - 3. Odontoma
    - 4. Ameloblastoma
    - 5. Cementoma
  - B. Malignant
    - 1. Carcinoma
    - 2. Sarcoma
    - 3. Metastatic carcinoma
    - 4. Basal cell carcinoma

Week 1 Chapter 30 Introduction to Pharmacology  
 Week 2 Chapter 30 Drugs Commonly Prescribed by a Dentist  
 Week 3 Chapter 30 Tranquilizers and Antidepressants  
 Week 4 Chapter 31 Introduction to Dental Office Emergencies  
 Week 5 Chapter 31 Common Dental Office Emergencies  
 Week 6 Chapter 17 Introduction to Oral Pathology  
 Week 7 Chapter 17 Developmental Abnormalities  
 Week 8 Chapter 17 Diseases of the Oral Tissues  
 Week 9 Chapter 17 Viral, Bacterial, and Fungal Infections  
 Week 10 Chapter 17 Non-specific infections  
 Week 11 Chapter 17 Neoplasms  
 Week 12 Chapter 17 Malignancies  
 Week 13 Chapter 17 Carcinoma  
 Week 14 Chapter 17 Sarcoma  
 Week 15 Chapters 30 and 31 Sarcoma  
 Week 15 Chapters 30 and 31 Review  
 Week 16 Chapter 17 Review  
 Final Exam

**STUDENT ATTENDANCE POLICY:**

Attendance is required at all lecture and lab sessions. The absentee policy in the Dental Department is different from the general college policy. Absences cannot exceed 10% of the total lecture hours nor 10% of the total lab hours. Therefore, if absences exceed 10% in either portion of the course, the student will be dropped from the course and must immediately withdraw from the dental assisting program. It is the student's responsibility to keep a personal record of his/her absence status.

Absences cannot be made up; however, it is the student's responsibility to make up all work missed, obtain any handouts given and learn of any announce future assignments or test. If an absence results in a missed test, a make-up test will be given to the student on the first day of return to school. Failure to take the missed test upon the first day of return to school will result in a ten-point reduction of the test grade.

If a lab session is missed, the missed lab procedure(s) must be made up at a time decided by the instructor. If the session requires the use of a student lab partners, the student making up the lab is responsible for getting a partner to work with during this make-up time.

Three tardies will equal one absence. If a student misses 15 minutes or more of a lecture or lab hour, it will be counted as an absence.

### **Request for Excused Absences for Religious Observances**

In compliance with G.S. 115D-5, MCC policy permits a student to be excused, with the opportunity to make-up any test or other missed work, a minimum of two excused absences per academic year for religious observances required by the student's faith. The policy limits the excused absences to a maximum of two days per academic year.

Students who wish to be excused for a Religious Observance required by their faith must complete and submit a request form to the instructor(s) prior to the census date of each class. The Request for Excused Absences for Religious Observances form can be picked up from Student services. This does not supersede the college-wide attendance policy as outline in the college catalog or syllabus, with the exception of a reasonable accommodation for the make-up of missed course work.

## **COURSE POLICIES:**

### Academic Integrity Statement

See MCC Dental Assisting Student Handbook for the MCC Code of Dental Assisting Policy. Any student caught violating this Code (i.e. cheating, plagiarizing, or other dishonorable acts), in academic work is subject to dismissal from the program or disciplinary action.

### Conduct:

Behavior and appearance at all times in classroom and laboratory should be those of a professional.

### Conferences:

Students are welcome to meet with the instructor during a scheduled appointment time to discuss their academic performance or seek additional help.

### Safety:

Students must follow safety requirements. Students who ignore or violate safety requirements will be subject to discipline, which may include dismissal from the course.

Students are required to wear the following for safety reasons during the clinic session and rotations:

- a. safety glasses
- b. masks
- c. gloves
- d. dosimeter (if available)
- e. scrubs
- f. lab coat or disposable gown

## **EXPOSURE POLICY:**

In event of an occupational exposure to blood borne pathogens, the student will immediately report the incident to the affiliating dentist during clinical rotations. The student or affiliating dentist or staff **MUST** immediately report

the incident to the Dental Assisting faculty at 252-792-1521 ext. 299. The Dental Assisting faculty will follow ASHA standards in counseling the exposed individual regarding their rights and will complete required documentation and follow-up. The complete Post-Exposure Protocol may be found in the Infection Control Manual, 2000.

See your Dental Assisting Handbook for additional information

**If you cannot reach your instructor, you may contact Dr. Phyllis Broughton, Dean of Academic Affairs and Student Services at 252-789-0 246 or 252-789-0247 by phone, pbroughton@martincc.edu by e-mail, or in person at her office in Building 2, Room 33.**

**To access the Martin Community College Career Catalog for policies and curriculum requirements, please go online to [www.martincc.edu](http://www.martincc.edu).**

*If you have a need for a disability-related accommodation, please notify the Student Services counselor at (252) 789-0293.*

## Addendum A

### LEARNING EXPERIENCE REPORT

Student will submit a Learning Experience for each of the following learning objectives for DEN 103 Dental Sciences.

Note: Format a paragraph for each learning experience with the learning objective, action taken, result achieved with the date(s) and time(s) allocated. Please attach a copy of this report for each of your Learning Experiences to the Dental Assistant Director.

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#### **Learning Experience Evaluation/Competency:**

(Completed by the Dental Assistant Director)

<b># Learning Objective (from the above list)</b>	<b>Knowledge Level (Rating 1-4)</b>	<b>Demonstration (Rating 1-4)</b>

#### **Evaluation Scale:**

- 1 Student demonstrates excellent knowledge and skills and can teach other students
- 2 Student demonstrates excellent knowledge and skills



- 3 Student demonstrates expected knowledge and skills
- 4 Student fails to demonstrates expected knowledge and skills

**Signature:**

Student: \_\_\_\_\_ Date: \_\_\_\_\_

Dental Assistant Director: \_\_\_\_\_ Date: \_\_\_\_\_