

## **COURSE INFORMATION**

COURSE PREFIX/NO:	<b>DAT 123</b>
COURSE TITLE:	<b>Oral Medicine and Oral Biology</b>
LECTURE HOURS/Week:	3.0
LAB HOURS/Week:	0.0
CREDIT HRS/SEMESTER:	3.0

## **DL ATTENDANCE/VA CERTIFICATION TEXTBOOK INFORMATION**

## **COURSE DESCRIPTION**

This course presents a basic study of oral pathology, pharmacology, nutrition, and common emergencies as related to the role of the dental assistant.

Co-Requisites: DAT 164, DAT 127

Pre-Requisites: DAT 112, DAT 115, DAT 113, DAT 154, DAT 118, DAT 121

**ENTRY LEVEL SKILLS:** None

## **COURSE COMPETENCIES:**

1. Discuss the importance of obtaining a medical history and recording vital signs prior to dental treatment.
2. Demonstrate the operation of the oxygen tank and identify the components of the emergency drug kit.
3. Identify emergencies that can occur in a dental office and respond with appropriate action.
4. Understand the general principles of pharmacology as it relates to dentistry.
5. Determine the management of clients who suffer respiratory disorders and identify the drugs to alleviate respiratory distress.
6. Identify clients with cardiovascular disorders and determine the proper management prior to, during, and after dental treatment and identify drugs used to treat cardiovascular disorders.
7. Determine the correct pre-operative management of clients with diabetes and explain the use of insulin in treating diabetes.
8. Determine the proper management of women in the various stages of pregnancy and identify complications that may arise due to taking medication during pregnancy.
9. Determine the proper management of clients who suffer neurocerebral disorders.
10. Discuss the management of clients experiencing an allergic reaction and anaphylaxis.
11. Identify the various types of local and general stages of anesthetics and their modes of action, complications, and treatment during an emergency
12. Understand the role of nutrition during the life of an individual. Identify oral

manifestations associated with essential nutrient deficiencies.

13. Discuss special diets for clients who are receiving various types of dental treatments.

14. Identify the etiology, description, signs and symptoms, treatment, and prevention of certain oral diseases.

## **COURSE REQUIREMENTS**

In order to successfully complete DAT 123, the student is required to fulfill the following requirements:

1. Attend all lecture classes

2. Complete all reading assignments

3. Successfully complete all weekly quizzes with a minimum grade of 70% 4.

Successfully complete all tests with a minimum grade of 70% 5. Adhere to the dress code

## **EVALUATION STRATEGIES Testing**

Students will be evaluated in Oral Medicine and Oral Biology by quizzes, tests and a final examination. The tests will be multiple choice, matching, fill in the blank and theory application questions (short essay).

## **METHODS OF INSTRUCTIONS**

Lecture Discussion Demonstrations Overhead Projections Audio-visual aids

Applications Written tests

## **Remedial Action**

Students must meet the 70% proficiency level in order to successfully complete DAT 123.

Students who fail to meet the criteria will be dismissed from the Dental Assisting Program.

## **Absenteeism**

Students are expected to attend all lecture sessions. In case of an unavoidable absence students must contact the instructor prior to the class. Any student who is absent on a test day will automatically have ten (10) points deducted from the test grade. Students who are absent on a day a quiz is given will not have the opportunity to make up the quiz and will be given a grade of zero "0" for that quiz. If a student is absent for more than three (3) consecutive days, a doctor's statement will be needed.

Students are responsible to make an appointment with the Instructor to set up a time to make-up the test. Students must make up the missed test within one (1) week or a grade of zero (0) will be given for that test.

## **Tardiness**

Any student who is not punctual to class will not be allowed to enter class until a break is given. Three (3) tardies will count as one (1) absence.

Any absence in excess of three (3) will be grounds for dismissal from the DAT Program.

## **Grading**

**The final grade scale for DAT 123 is as follows:** 100-90 A  
89-80 B 89-80 B 79-70 C 69-below F

**The grade for DAT 123 will be determined as follows:**

Quizzes averaged as one (1) major test grade Written tests 100%

## **Oral Medicine and Oral Biology DAT 123 Course Outline I. Introduction**

- A. Medical/Dental Emergencies
- B. Principle of Pharmacology
- C. Nutrition Across the Life Span
- D. Oral Diseases

### **II. Prevention**

#### **A. Medical/Dental History**

1. Physical inspection
2. Vital signs
3. Dialogue history
4. Medical consultation
5. ASA Classification
6. Summary
7. Up-date history

### **III. Emergency Drugs and General Preparation A. Injectable drugs**

1. Types of drugs
2. Routes of administration

#### **B. Noninjectable drugs**

1. Oxygen
2. Vasodilator

#### **C. General preparation**

1. Training
2. Team management
3. Emergency practice drills

4. Outside medical assistance
5. Preventing legal problems

#### IV. Dental Emergencies and Occupational Hazards A. Syncope and postural hypotension

1. Definition
2. Symptoms
3. Etiology
4. Prevention/treatment

#### B. Common iatrogenic emergencies

1. Foreign objects in the eye
2. Soft tissue laceration
3. Subluxation
4. Alveolitis
5. Needle and instrument breakage
6. Broken endodontic file or reamer

#### C. Occupational hazards

1. AIDS
2. Herpetic whitlow
3. Mercury contamination
4. Hepatitis
5. Radiation
6. Nitrous oxide

#### V. Principles of Pharmacology

##### A. Drug Schedule

1. Controlled Substance Act
2. Schedule I - V
3. Prescription writing

##### B. Major Routes of Administration 1. Oral

2. Rectal
3. Parenteral

##### C. Antibiotics

1. Penicillin
2. Tetracycline
3. Erythromycin
4. Premedication

##### D. Agents for the control of anxiety

1. Antianxiety agents
2. Sedative and hypnotic agents

#### VI. Respiratory Distress

##### A. Airway obstruction

1. Etiology

2. Symptoms
3. Symptoms
4. Prevention/treatment

#### B. Hyperventilation

1. Etiology
2. Symptoms
3. Prevention/Treatment

#### C. Asthma

1. Etiology
2. Symptoms
3. Prevention/Treatment
4. Emergency management

#### D. COPD and tuberculosis

1. Etiology
2. Symptoms
3. Prevention/Treatment

### VII. Cardiovascular Disease

#### A. Congestive heart failure

1. Etiology
2. Symptoms
3. Drug therapy/treatment

#### B. Angina Pectoris

1. Symptoms
2. Prevention
3. Drug therapy
4. Emergency management

#### C. Myocardial Infarction

1. Symptoms
2. Prevention
3. Drug therapy
4. Emergency management

#### D. Congenital heart disease

1. Types
2. Dental considerations

#### E. Rheumatic heart disease

1. Etiology
2. Dental considerations

F. Subacute bacterial endocarditis

1. Etiology
2. Premedication
3. Complications

VIII. Altered consciousness

A. Diabetes mellitus

1. Etiology
2. Symptoms
3. Prevention/treatment
4. Emergency management

IX. Pregnancy

A. Management of the pregnant client

1. Appointment scheduling
2. Client comfort
3. Dental treatment

B. Contradictions to dental treatment

1. Effects of drugs
2. Drugs of choice

X. Neurocerebral disorder

A. Epilepsy and stroke

1. Etiology
2. Types of seizures
3. Drug therapy
4. Prevention
5. Emergency management

XI. Allergic reactions

A. Contact dermatitis

1. Signs
2. Symptoms
3. Prevention and treatment

B. Angioedema

1. Signs
2. Symptoms
3. Prevention and treatment

C. Anaphylaxis

1. Signs
2. Symptoms
3. Prevention and treatment

## XII. Anesthesia

A. Local

B. General

C. Sedation

## XIII. Nutrition

## XIV. Oral Pathology

A. Types of oral lesions

1. Etiology

2. Symptoms

3. Description

4. Treatment