

## **COURSE INFORMATION**

<b>COURSE PREFIX/NO:</b>	<b>DHG 115</b>
<b>COURSE TITLE:</b>	<b>Medical and Dental Emergencies</b>
<b>LEC HOURS/Week:</b>	<b>2.0</b>
<b>LAB HOURS/Week:</b>	<b>0.0</b>
<b>CREDIT HOURS/Semester:</b>	<b>2.0</b>

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

### **COURSE DESCRIPTION:**

This course provides a study of the various medical/dental emergencies and appropriate treatment measures. Additionally, it includes managing medically compromised dental client and provides for CPR certification.

Co-Requisites: DHG 125, DHG 154

Pre-Requisite: Admission to the Dental Hygiene Program

**ENTRY LEVEL SKILLS:** None

### **COURSE COMPETENCIES:**

1. Understand the importance of an accurate and complete medical history including vital signs.
2. Be familiar with the operation of the oxygen tank in the clinic and the components of the emergency kit.
3. Identify common emergencies that can occur in a dental office and respond with appropriate action, including reactions to local anesthetics.
4. Identify clients with cardiovascular disorders and determine the management prior to, during and after dental treatment.
5. Determine the management of client who suffer with respiratory disorders.
6. Identify clients with a history of neurocerebral disorders and determine the appropriate management prior to, during and following dental treatment.
7. Determine the correct pre-operative management of clients with diabetes and explain the use of insulin in treating diabetes.
8. Identify patients with kidney and liver disease and determine the proper management during dental treatment.
9. Identify various types of allergic reactions and their treatment.
10. State the various types of blood disorders and explain how they can influence dental treatment.
11. Describe the management of immunocompromised clients to include those with a history of Sexually Transmitted Diseases, HIV, AIDS, Lupus, Arthritis, Prosthetic Implants and organ transplants.

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### **TEXT**

Clinical Practice of the Dental Hygienist, Wilkins, 8th ed.

Lecture Manual, Clinic Manual

## **REFERRAL TEXT**

Medical Emergencies in the Dental Office, Malamed  
Dental Management of the Medically Compromised Patient, Little & Falace

## **COURSE REQUIREMENTS**

In order to successfully complete DHG 115, the student is required to fulfill the following requirements:

1. attend all lecture sessions
2. take all written tests and quizzes
3. complete all assignments as required by course instructor
4. each student must be currently certified in CPR by the American Heart Association or the American Red Cross

## **METHODS OF INSTRUCTION**

Lecture  
Discussion  
Demonstrations  
Overhead projections  
Audio-visual aids  
Applications

## **EVALUATION STRATEGIES**

### **Testing**

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

### **Remedial Action**

Students must meet the 80% proficiency level in order to successfully complete DHG 115. Students who fail to meet the criteria will be dismissed from the Dental Hygiene 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 seven (7) 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 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 DHG Program.

### **GRADING**

The final grade scale for DHG 115 is as follows:

100-94	A
93-87	B
86-80	C
79-below	F

The grade for DHG 115 will be determined as follows:

Quizzes before midterm averaged as one (1) major test grade

Quizzes after midterm averaged as one (1) major test grade

Tests (2)	60%
Midterm	20%
Final	<u>20%</u>
	100%

## **MEDICAL AND DENTAL EMERGENCIES**

### **DHG 115 COURSE OUTLINE**

- I. Introduction - Prevention
  - A. Medical/Dental History
    1. history taking
    2. dialogue history
    3. physical inspection
    4. vital signs - define
    5. medical consultations
    6. ASA Classification
    7. summary
    8. up-date history
    9. drug cards

- II. Vital Signs
  - A. Blood Pressure
    - 1. equipment
    - 2. technique
    - 3. documentation
    - 4. contraindications
  - B. Pulse
    - 1. technique
    - 2. documentation
    - 3. contraindication
  - C. Respiration
    - 1. technique
    - 2. documentation
    - 3. contraindication
  - D. Temperature
    - 1. technique
    - 2. equipment
    - 3. documentation
    - 4. contraindication
- III. Emergency Drugs and Equipment
  - A. Injectable Drugs
    - 1. routes of administration
    - 2. preparation
    - 3. types
  - B. Noninjectable Drugs
    - 1. oxygen
    - 2. vasodilator
  - C. Primary Emergency Equipment (critical)
    - 1. injectable
    - 2. noninjectable
    - 3. emergency equipment
      - a. oxygen
      - b. suction & suction tips
      - c. tourniquets
      - d. syringes
- IV. General Preparation
  - 1. training
  - 2. team management

3. emergency practice drill
  4. outside medical assistance
- V. Unconsciousness
- A. Syncope
    1. etiology
    2. symptoms
    3. prevention
    4. treatment
  
  - B. Postural Hypotension
    1. etiology
    2. symptoms
    3. prevention
    4. treatment
- VI. Respiratory Distress
- A. Airway Obstruction
    1. etiology
    2. symptoms
    3. prevention
    4. treatment
  
  - B. Hyperventilation
    1. etiology
    2. symptoms
    3. prevention
    4. treatment
  
  - C. Asthma
    1. etiology
    2. symptoms
    3. prevention/treatment
    4. emergency management
  
  - D. Heart Failure Acute Pulmonary Edema
    1. etiology
    2. symptoms
    3. treatment
  
  - E. Tuberculosis
    1. definition
    2. etiology
    3. symptoms
    4. treatment

5. dental management

VII. Altered Consciousness

A. Diabetes Mellitus

1. etiology
2. symptoms
3. prevention/treatment
4. emergency management

VIII. Neurocerebral Disorders

A. Cerebrovascular Accident

1. types/etiology
2. symptoms
3. prevention/treatment
4. emergency management

B. Epilepsy

1. etiology
2. types of seizures
3. prevention/treatment
4. emergency management

IX. Cardiovascular Disorders

A. Congestive Heart Failure

1. causes
2. symptoms
3. drug therapy/treatment
4. dental management

B. Angina Pectoris

1. symptoms
2. prevention
3. drug therapy/treatment
4. emergency management

C. Myocardial Infarction

1. terms
2. symptoms
3. causes
4. drug therapy/treatment
5. emergency management

D. Congenital Heart

1. etiology
2. dental considerations

3. types
    4. treatment
  - E. Rheumatic heart disease
    1. rheumatic fever
    2. etiology/treatment
    3. dental considerations
  - F. Subacute Bacterial Endocarditis
    1. etiology
    2. premedication
    3. treatment
    4. complications
  - G. Hypertension
    1. definition
    2. etiology
    3. prevention
    4. symptoms
    5. dental management
- X. Allergic Reaction
  1. etiology
  2. treatment
  3. dental considerations and management
  
- XI. Local Anesthesia and Associated Reactions
  - A. Local Anesthetic Agents
    1. types
    2. health status of the patient
    3. complications associated with local anesthesia
  
- XII. Occupational Hazards
  - A. Hazards to Office Personnel
    1. AIDS
    2. Herpetic Whitlow
    3. mercury contamination
    4. hepatitis B
    5. radiation
  - B. Dental Emergencies
    1. broken anesthetic needle
    2. broken endodontic reamer or file
    3. soft tissue injury

4. alveolitis
5. nitrous oxide oxygen sedation
6. aspiration of a foreign object

XIII. Liver Disease

A. Hepatitis

1. etiology
2. types
3. dental considerations and management

B. Alcoholic Liver Disease

1. symptoms
2. dental management

XIV. Renal Failure

1. etiology
2. treatment
3. dental management

XV. Blood Disorders

1. types
2. etiology
3. dental considerations and management
4. treatment

XVI. Immunocompromised Clients

A. HIV/AIDS, and other sexually transmitted diseases

1. etiology
2. treatment
3. dental considerations and management

B. Arthritis/Lupus

1. etiology
2. treatment
3. dental considerations and management

C. Organ Transplant

1. types
2. dental considerations and management

D. Prosthetic Implants

1. types
2. dental considerations and management

#### XVII. Legal Problems of Emergency Care

1. duty to treat
2. duty not to abandon
3. duty of preparedness
4. dental staff responsibilities
5. preventing legal problems