

# D H 312: EMERGENCY PROCEDURES

## Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2023
Units:	1
Hours:	1 lecture per week (12 total per quarter)
Advisory:	Not open to students with credit in D H 71.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

## Student Learning Outcomes

- Students will be able to identify the medications in an emergency drug kit, including the use, dosing and indications/contraindications.
- Students will be able to describe the signs and symptoms of the most common medical emergency which occurs in dental practice. Appropriate intervention will be performed.

## Description

This course is a study of common medical emergencies that may occur during delivery of dental care. Emphasis is placed on methods to prevent emergencies from occurring and procedures to manage emergency situations. Ethical and legal aspects in assisting during emergencies are also discussed. Intended for students in the Dental Hygiene Baccalaureate Degree Program; enrollment is limited to students accepted in the program.

## Course Objectives

The student will be able to:

1. Identify the common medical emergencies that occur in the dental office
2. Describe the underlying biological processes responsible for the emergency
3. Describe the signs and symptoms for common medical emergencies
4. List procedures to manage common medical emergencies
5. Indicate the methods to prevent common medical emergencies in the dental office
6. Identify the drugs and equipment used in the treatment of common medical emergencies and the components of a basic emergency kit and their primary uses in the emergency
7. Identify patients who are at higher risk for medical emergencies through physical evaluations, such as vital signs and ASA assessment
8. Practice simulated emergency situations and describe the procedures which would be appropriate in the management of these situations
9. Describe the legal and ethical responsibilities of the dental team in the management of emergency situations

## Course Content

1. Identify the common medical emergencies that occur in the dental office
  - a. Syncope
  - b. Postural hypotension
  - c. Angina
  - d. Acute myocardial infarct
  - e. Cerebrovascular accident
  - f. Choking
  - g. Hyperventilation
  - h. Asthma
  - i. Drug related emergencies
  - j. Diabetes mellitus
2. Describe the underlying biological processes responsible for the emergency
  - a. Pathophysiology
  - b. Contribution of stress and anxiety
  - c. Pre-existing conditions
3. Describe the signs and symptoms for common medical emergencies
  - a. Clinical manifestations
4. Identify procedures to manage common medical emergencies
  - a. Conscious patient vs. unconscious patient
  - b. Patient positioning
  - c. Airway-breathing-circulation (BLS)
  - d. Definitive care
  - e. Staff assignments
5. Examine the methods to prevent common medical emergencies in the dental office
  - a. Medical history assessment
    - i. Dialogue history
    - ii. Medical history questions indicating undiagnosed conditions
    - iii. Medical history questions indicating ASA status
    - iv. Medical consultation
  - b. Treatment modifications
    - i. Stress reduction protocol
      1. Premedication
        - a. Antianxiety agent
      2. Appointment planning
      3. Length of appointment
      4. Psychosedation
      5. Pain control
    - c. Office and staff preparation
      - i. Staff assignments
        1. Emergency kit expiration date and compressed oxygen availability
        2. Assignments during an emergency
      - ii. Practice drills
  6. Identify the drugs and equipment used in the treatment of common medical emergencies and the components of a basic emergency kit and their primary uses in the emergency

- a. Equipment
    - i. Blood pressure cuff and stethoscope
    - ii. Oxygen
    - iii. AED unit
    - iv. Ambu bag
  - b. Drugs
    - i. Nitroglycerin pills or spray
    - ii. Antihistamine
    - iii. Epinephrine
    - iv. Inhaler
    - v. Analgesic
    - vi. Ammonia vaporale
    - vii. Glucose
7. Evaluate patients who are at higher risk for medical emergencies through physical evaluations, such as vital signs and ASA assessment
- a. American Society of Anesthesiologist (ASA) physical status classification system
    - i. ASA I
    - ii. ASA II
    - iii. ASA III
    - iv. ASA IV
    - v. ASA V and ASA VI
8. Practice simulated emergency situations and demonstrate the procedures which would be appropriate in the management of these situations
- a. Syncope
  - b. Postural hypotension
  - c. Angina
  - d. Acute myocardial infarct
  - e. Cerebrovascular accident
  - f. Choking
  - g. Hyperventilation
  - h. Asthma
  - i. Drug related emergencies
  - j. Diabetes mellitus
9. Analyze the legal and ethical responsibilities of the dental team in the management of emergency situations
- a. Liability to staff and dentist
  - b. Risk management
    - i. Liability insurance
    - ii. Incident report form
    - iii. Documentation in the patient chart
    - iv. Communication strategies
  - c. Standard of care
  - d. Respondeat superior
  - e. Ethics
    - i. Patient autonomy
      - 1. Informed consent
    - ii. Nonmaleficence
    - iii. Veracity
    - iv. Competence
    - v. Integrity

## Lab Content

Not applicable.

## Special Facilities and/or Equipment

1. Multi-media lecture room.
2. Simulated emergency kit contents.
3. Computer with internet.
4. When taught via Foothill Global Access, on-going access to computer with email software and hardware; email address.

## Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Multiple choice and short quizzes  
Multiple choice midterm and final exam  
Essay type homework assignments

## Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

Lecture  
Discussion  
Demonstration

## Representative Text(s) and Other Materials

Malamed, S.F.. Medical Emergencies in the Dental Office, 8th ed. (ISBN-13: 9780323776158). 2022.

## Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

1. Online assignments and practice test
2. Essay type assignments for emergency scenarios and ethical dilemma
3. Chapter readings in assigned textbook, 2-3 chapters per week

## Discipline(s)

Dental Technology