

FULL TITLE: **Medical Emergencies in Dental Practice****SEMESTER:** Fall 2018 Year 1, Semester 1**COURSE DESCRIPTION:**

This course provides the student with the basis in prevention and management of medical emergencies in the dental office. Instruction is given in health evaluation utilizing health history and vital signs. Emphasis is on the recognition of clinical signs and symptoms of emergencies and the prevention of emergency escalation. The management of medical emergencies is outlined along with drugs and equipment utilized in an emergency.

CONTACT HOURS: 1 hour lecture**WEEKS:** 17.5**UNITS:** 1**DAY & TIME:** Tuesday 2:00-3:00, Race 4076

INSTRUCTOR: Michael Danford, DDS
E-mail: mdanford@santarosa.edu
Office hours: posted and by appointment
All electronic communication will be conducted through the email address you have registered with the school.

LECTURE RATIO: 1:24

PREREQUISITES: Evidence of Satisfactory completion of a course in Healthcare Provider CPR by the American Heart Association or Red Cross

COREQUISITES: DH 70, DH 71A**REQUIRED TEXTBOOK:**

- Medical Emergencies in the dental office, 7th edition, Malamed, Stanley 2016
- Lexicomp Online for Dentistry – online drug and medication information
 - Access instructions: Students can go to the library website at libraries.santarosa.edu and click on the "Articles and Databases" tab (below) and click on the option to "Go directly to a database". From there they select "Lexicomp Online for Dentistry" and they are in! If they are off campus, they will be asked for their 9 digit student ID and PIN (the same ones they use to get into their portal). If they are on campus, they go straight to the database.

LECTURE MATERIALS: All lecture materials are found on the SRJC website CANVAS

ONLINE MATERIALS: A CANVAS online site will be utilized for this class. Students are responsible for checking the site daily for announcements and helpful supplemental materials. Students must also maintain a valid e-mail address with the College so that communications issued through this site are received.

OUTCOMES AND OBJECTIVES

Student Learning Outcomes: Upon completion of this course, at the novice level as defined in the program's competency statements the student will be able to:

1. Discern and manage the medical emergencies potentially occurring in the dental hygiene practice in a rapidly changing health care environment.
2. Acquire and synthesize health-related information in a critical, scientific, and effective manner.
3. Systematically collect, analyze, and accurately record baseline data, on the general, oral, and psychosocial health status of patient.

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

1. Apply theoretical and practical knowledge, including physiological and psychological concepts, in preventing medical emergencies in the dental office.
2. Apply theoretical and practical knowledge, including physiological and psychological concepts, in responding to medical emergencies in the dental setting.
3. Recognize and respond to the signs and symptoms of the most common medical emergencies that occur in a dental office and discuss the importance of a thorough medical history for each patient.
4. Analyze emergency situations and implement appropriate protocols.
5. Obtain, interpret, and evaluate a completed medical and dental history for every patient.
6. Communicate effectively in interactions with the emergency health care providers and patients.
7. Demonstrate critical thinking behaviors in responding to emergency situations.
8. Recognize and prepare the items commonly found in a basic emergency kit.
9. Recognize and operate the equipment necessary to manage a medical emergency in a dental office.
10. Implement the "team approach" to prepare the dental team for medical emergencies.
11. Take, evaluate, and record the patient's vital signs and recognize the significance of vital signs in relation to patient health history and patient treatment.
12. Demonstrate the utilization of the Lexicomp Online for Dentistry drug reference in relation to health history and treatment planning.

TOPICS TO BE COVERED IN THIS COURSE:

1. Preventing medical emergencies
 - a. Complete and updated health history
 - b. Patient vital signs
 - c. Stress management
 - d. Lexicomp Online for Dentistry drug reference

2. Emergency preparedness
 - a. Staff preparation Cardio Pulmonary Resuscitation
 - b. Role of each staff member
 - c. Role playing
 - d. Early recognition
 - e. Effective communication
3. Medical emergency procedures
 - a. Site-specific (e.g. SRJC, dental office) emergency protocol
 - b. Emergency drugs and devices
 - c. Patient airway maneuvers
 - d. Emesis
 - e. Foreign body removal
4. Differential diagnosis and management of the unconscious patient
5. Differential diagnosis and management of altered consciousness
6. Recognition of signs and symptoms and management of specific conditions
 - a. Syncope
 - b. Hyperventilation
 - c. Angina pectoris
 - d. Cardiac arrest
 - e. Myocardial infarction
 - f. Respiratory arrest
 - g. Asthma
 - h. Epilepsy
 - i. Cerebrovascular accident (stroke)
 - j. Allergy
 - k. Anaphylactic shock
7. Diabetes
 - a. Hypoglycemia
 - b. Hyperglycemia
 - c. Insulin shock
 - d. Diabetic coma
8. Basic Emergency kit
 - a. Injectable medications
 - b. Emergency adjuncts
 - c. Oxygen administration
 - d. AED
 - e. Update and maintenance

COMPETENCY AND CURRICULUM MAPPING

Refer to the Competency Statements and Curriculum Mapping found in your Student Clinical Policy Manual to determine the program competency and the level (novice, beginner, competent) you will achieve in this course. Competencies for this course are at the novice to beginner level.

METHODS OF INSTRUCTION

Lecture and discussion of course material

Reading assignments

Clinical demonstrations and weekly clinic assignments

Case based instruction utilizing critical thinking
Online access to course materials

REQUIREMENTS AND GRADING INFORMATION

METHODS OF EVALUATION:

- Written quizzes, midterms and final (written/practical) examinations
- Homework
- Written Reports
- Professionalism evaluation
- Group Presentation

COURSE GRADING CRITERIA

Quizzes (10 total @ 5 points each)	50 points
Midterm Exam	50 points
Individual Assignments	30 points
Abstract 10	
Quick guide 20	
Self/Peer Emergency Scenario Evaluation	
5 Scenarios @ 10 points each	50 points
Team Projects	70 points
Paper – 40 points	
Presentation – 20 points	
Peer evaluations 10 (5 @ 2 points each)	
Final exam	100 points

Total	350 points

Reading Assignments: It is required that all reading assignments be completed **before** the beginning of lecture. You are responsible for all information presented in the readings even if this material is not discussed in lecture. Due to the volume of course material, independent study is required. Students must come to class prepared to discuss all reading assignments. Please make note of anything you do not understand for further clarification in class

Quizzes (100 points) - Due to the limited amount of class time, weekly quizzes will be completed prior to the class utilizing the CANVAS system. Quizzes will cover that week's reading assignment. The quizzes should be available on CANVAS up until the start of class. No late or make up quizzes will be allowed.

Midterm (50 Points)

INDIVIDUAL ASSIGNMENTS

Research Abstract - Due Week 8 (10 points) Each student will be required to research a scientific article related to management of medical emergencies. Once the student has selected an appropriate and approved article, the student will use the abstract guidelines provided to write an abstract of publishing quality.

Abstract Article Evaluation Rubric

Criteria	All Criteria Met 2 points	Most Criteria Met 1 point	Criteria Not Met 0 points
Format: Double Spaced 100-200 words	Properly formatted	Minor formatting error	Not formatted
The Objective/Purpose of the Study	Clearly Stated	Stated, but unclear	Not fully addressed
Research Method/Approach	Clearly Stated	Stated, but vague/unclear	Not fully addressed
Results	Clearly Stated	Stated, but confusing/not easy to understand	Not Well Stated, missing outcome
Conclusions	Clearly Stated	Attempted to summarize, unclear	Not Well Stated / Missed the point of the study

Quick Reference Emergency Management Guide – Due 11/27 (20 points)

Throughout the semester we will cover specific medical emergencies most likely to occur in the dental office. As we complete each topic we will develop a quick guide to patient management. At semester's end each student will have accumulated several "quick guides." From this collection the student will create a reference sheet for the purpose of being used as a clinical resource for quick reference during medical emergencies.

Self/Peer Emergency Scenario Evaluation – Due 12/4 (total 50 points)

There are 5 different scenarios for you to work through in the clinic setting with two of your classmates. Acting out a practice emergency in each of the following areas: Unconscious patient, Altered consciousness, Respiratory Distress, Seizure and Chest Pain. The evaluation sheets are to be printed out and filled out by the two classmates and returned to the instructor. These evaluations can be done any time after the lecture on that specific topic.

TEAM ASSIGNMENT – Presentation and paper due 12/4 (total 70 points)

Assignment/Course Objectives:

- 1) Recognize the items commonly found in a basic emergency kit.
- 2) Recognize the equipment necessary to manage a medical emergency in a dental office.
- 3) Recognize the value of performing training drills using the "team approach" to prepare members of the dental team for medical emergencies.
- 4) Utilizing current knowledge to support/encourage best practices within the dental community.

Using the criteria for an effective emergency management system presented in class, each team (of six students) is to analyze the emergency system in a dental office/clinic in the community. Each team is to identify how the office meets each criterion and develop

methods to suggest modifications to any deficient areas. This project will be presented in two ways:

1. Written Paper: A 700 + word paper using APA style. This means the paper will include a cover page, in article citations and a reference list. The paper will include two parts:

- a. A description and analysis of the findings in the office you visit, with suggestions for improvement in the system if any were identified.
- b. A description of the method your team used to complete the process, with an analysis of the teamwork.

2. Class Presentation: It is anticipated that each member of the team will contribute equally and therefore the grades for each team member will be the same.

Please work in your clinic team. Your presentation to the class can be any format (video, skit, slides etc.). Please use the rubric on following page as your cover page.

Feel free to be creative and have some fun with this project.

Team Presentation & Paper Grading Rubric

Paper:

40 points total

- Organization (20 points total)
Includes:
 - Intro
 - Body
 - Conclusion
 - Completeness
 - All features of ER system included
 - APA formatting, spelling, grammar, etc.
- Process of Analysis (10 points total)
- Appropriateness of suggested upgrades (10 points total)

Presentation:

20 points total

- Organization of the material (10 points total)
- Presentation skills (5 points total)
 - Appearance
 - Voice
 - Body language
 - Vocabulary
- Use of Visual Aids (5 points total)

Peer Evaluations

10 points total

A peer evaluation form is to be downloaded and turned in for each one of your team members. Each evaluation by your group members will have five attributes with a ranking of one to five on each attribute. Total possible rank is 25. 15-25 = 2 points 10-14 = 1 point 0-9 = 0 points. Each evaluation is worth up to two points, for a total of ten points.

Final Exam (100 points) Final exam is cumulative. Date and time for the final exam should be posted on the door of the locker room at the beginning of the semester

FINAL COURSE GRADE

The final course grade will be taken from the total of all available points, and will be based on the Department Grading Scale

GRADE SCALE:

93-100%	= A
85 - 92%	= B
75 - 84%	= C
65 - 74%	= D

A total score less than 75% requires repeating the course and/or remediation.

COURSE STANDARDS

- Students must achieve a minimum of 75%. Failure to do so will result in a grade of "D" or lower in the course and failure of the course.
- A passing grade of 75% on the final exam is required regardless of the overall course grade
- Unless otherwise specified, all assignments are expected to be the individual student's work
- There will be no make-up tests or assignments – you must be on time and attend the entire class to be entitled to take the test or submit an assignment
- Any papers/assignments must be professional in presentation – typed or computer generated, neat and organized.
- ALL requirements for this course must be met; failing to meet any requirement will result in a failing grade for the course.
- The best way to learn is through active participation; therefore, we respect others by being on time, listening actively and by being polite even when we disagree with another's viewpoint.
- Electronic devices may be beneficial in the classroom and also distracting when they are used inappropriately. The use of any electronic device; computer, pad, phone and/or watch will only be used for direct class enhancement and/or to refer to information that is presented for this subject.
- Students are expected to attend all class sessions and be prepared to discuss assigned reading and other assignment at a collegiate and professional level.
- Professional, self-motivated and cooperative behavior is expected.
- Any student with a disability (e.g. physical, learning, psychological, visual, hearing, etc.) who needs to arrange accommodations must contact the instructor and Disability Resources Department the first week of the semester. All testing arrangements must be made two weeks prior to the exams.

INSTRUCTOR ASSISTANCE:

All students are encouraged to seek assistance from the course instructor. If you have any questions concerning assignments, content, etc., or if a problem arises that warrants instructor help, please do not hesitate to schedule an appointment with the course instructor at your earliest convenience.

GETTING THE HELP THAT YOU NEED IS YOUR RESPONSIBILITY

REMEDIATION:

Any student achieving less than 75% on all quizzes is required to arrange a meeting with the instructor to discuss deficiencies in their grade and arrange potential remediation.

PROFESSIONALISM:

Santa Rosa Junior College's Dental Hygiene Program believes that professionalism is an essential component to the development of a health care provider. Our program strives to nurture and develop strong levels of professional behavior. All dental hygiene students are expected to demonstrate professionalism in behavior, communication, patient privacy and judgment in the dental clinics, classrooms, and clinical rotation sites. All clinical and classroom faculty will offer feedback for this development by formal and informal means. Repetitive instances of non-professional behavior or speech at any time during matriculation in the program will not be tolerated and may result in program dismissal. A review of expectations and criteria for Professionalism is found in the Student Handbook.

QUALITY ASSURANCE:

Refer to the Quality Assurance plan found in your Clinic Manual and Student Handbook to determine the assurances designed to ensure that the dental hygiene program adheres to the standards of care.

HIPAA STATEMENT

As a student at SRJC Dental Hygiene program, you have a legal and ethical responsibility to safeguard the privacy of all patients and protect confidentiality and security of all health information. Protecting the confidentiality of patient information means protecting it from unauthorized use or disclosure in any format oral, FAX, written or electronic. Patient confidentiality is a central obligation of patient care. Any breaches in patient confidentiality or privacy may result in disciplinary action, up to and including dismissal from the program.

STUDENT HANDBOOK AGREEMENT

It is the responsibility of all students enrolled in the dental hygiene program to read and comply with all policies found in the Student Handbook. Failure to do so may result in dismissal from the program.

ATTENDANCE POLICY

Students are expected to attend all sessions of the course in which they are enrolled. Students are expected to be prepared and to begin class on time. A student may be dropped from the class when that student's absences exceed 10% of the total hours of class time; no more than 4 hours of lecture. Unless state or federal law requires that the absence be deemed excused, no instructor shall be required to make a distinction between excused and unexcused absences.

Students missing class/clinic time, before the 10% maximum, may be required to write a paper on the material missed.

TARDINESS: Please Refer to the Student Handbook – Students are expected to be present in the class/clinic/lab at the scheduled beginning time and remain until the end of class/clinic/lab. Quizzes and tests are given at the beginning of class/clinic/lab. If you are tardy to a class/clinic/lab you will have less time to take the scheduled quiz or test. The total amount of time tardy or early leaving cannot exceed the 10% attendance maximum. Arriving late for lecture or lab disrupts the instructor and your fellow classmates. Students will not be allowed to enter the class late if it interrupts class instruction, if the door is closed please wait until the instructor opens it at a natural break in the instruction

DISABILITY RESOURCE DEPARTMENT: Please refer to your student handbook for this information.

EMERGENCY EVACUATION PLAN: Please refer to your student handbook for this information.

COURSE ETHICS: Please refer to your student handbook for this information.

ACADEMIC GRIEVANCES: Please refer to your student handbook for this information.

DISMISSAL POLICY: Please refer to your student handbook for this information.

AGREEMENT WITH STUDENTS

This syllabus is an agreement, continued registration in this course means that you agree to the policies and procedures outlined in this syllabus. The syllabus/CANVAS site is intended to give the student guidance in what may be covered during the semester and will be followed as closely as possible. However, the instructor reserves the right to modify, supplement and make changes as the course needs arise