DHYG 256 – MEDICAL EMERGENCIES IN THE DENTAL OFFICE

A. **TITLE:** MEDICAL EMERGENCIES IN THE DENTAL OFFICE

B. **COURSE NUMBER:** DHYG 256

C. **CREDIT HOURS:** 1

D. **WRITING INTENSIVE COURSE:** NO

E. **COURSE LENGTH:** 15 WEEKS

F. **SEMESTER(S) OFFERED:** FALL

G. **HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY:** 1 HOUR OF LECTURE EACH WEEK

H. **CATALOG DESCRIPTION:** This course will discuss the steps taken to reduce the risk of medical emergencies in the dental office; will enable the student to identify the early signs of a medical emergency so s/he can properly manage that emergency while waiting for a paramedic to arrive on the scene. After completion of this course the student is expected to partake in various medical emergency drills in the clinical setting. One online lecture hour.

I. **PRE-REQUISITES/CO-COURSES:** Permission of Instructor

J. **GOALS (STUDENT LEARNING OUTCOMES):** By completion of this course, the student will meet the following course learning outcomes which are linked to the institutional learning outcomes. This course provides the foundation for the following dental hygiene competencies:

- 1.1, 1.15, 1.16, 5.2, 5.3, 5.4, 5.5, 6.2, 6.5, 6.6, 6.7

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>Institutional Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Describe the steps taken to reduce the risk of a medical emergency in the dental office; which includes obtaining and/or updating all histories at each appointment, obtaining a medical consultation when appropriate and making necessary referrals.</td>
<td>2. Critical Thinking</td>
</tr>
<tr>
<td>2. Identify the drugs found in a medical emergency kit.</td>
<td>3. Prof Competency</td>
</tr>
<tr>
<td>3. Explain the steps taken when managing the following medical emergencies:</td>
<td>2. Critical Thinking</td>
</tr>
<tr>
<td>• patient with partial or complete airway obstruction</td>
<td>3. Prof Competency</td>
</tr>
<tr>
<td>• angina pectoris and myocardial infarction</td>
<td></td>
</tr>
<tr>
<td>• stroke</td>
<td></td>
</tr>
<tr>
<td>• adrenal crisis</td>
<td></td>
</tr>
<tr>
<td>• hypoglycemic reaction and hyperglycemic reaction</td>
<td></td>
</tr>
<tr>
<td>• epileptic seizure</td>
<td></td>
</tr>
<tr>
<td>• delayed and immediate allergic reactions</td>
<td></td>
</tr>
<tr>
<td>• local anesthesia reactions</td>
<td></td>
</tr>
<tr>
<td>• toxic overdose</td>
<td></td>
</tr>
<tr>
<td>• shock</td>
<td></td>
</tr>
<tr>
<td>• thyroid storm</td>
<td></td>
</tr>
<tr>
<td>• fluoride overdose</td>
<td></td>
</tr>
<tr>
<td>• syncope</td>
<td></td>
</tr>
<tr>
<td>• orthostatic hypotension</td>
<td></td>
</tr>
<tr>
<td>• hyperventilation</td>
<td></td>
</tr>
<tr>
<td>• bronchial asthma</td>
<td></td>
</tr>
<tr>
<td>• congestive heart failure</td>
<td></td>
</tr>
</tbody>
</table>
4. Identify the signs and symptoms and steps taken to manage the following traumatic injuries:
   - hemorrhage
   - burns: first, second and third degree
   - chemical burns
   - internal poisoning
   - foreign body or chemical splash in the eye
   - dislocated jaw
   - facial fracture
   - avulsed tooth
   - broken instrument tip

* Specific objectives will be distributed for each unit.

K. **TEXTS:**

   Medical Emergency Manual written for the SUNY Canton Dental Hygiene Clinic by department faculty, most current edition

L. **REFERENCES:**


M. **EQUIPMENT:** no additional equipment other than the textbook and Medical Emergency Manual is required for this course.

N. **GRADING METHOD:** A – F
   A letter grade will be issued utilizing the conversion table below and students must achieve a minimum C grade in all dental hygiene courses.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>94 - 100</td>
</tr>
<tr>
<td>B+</td>
<td>90 - 93</td>
</tr>
<tr>
<td>B</td>
<td>84 - 89</td>
</tr>
<tr>
<td>C+</td>
<td>80 - 83</td>
</tr>
<tr>
<td>C</td>
<td>75 - 79</td>
</tr>
<tr>
<td>D</td>
<td>74 - 70</td>
</tr>
<tr>
<td>F</td>
<td>69 or lower</td>
</tr>
</tbody>
</table>

O. **MEASUREMENT CRITERIA/METHODS:**
   Weekly Assignments
   Chapter Exams
   Comprehensive Final Examination
   Medical Emergency Project

P. **DETAILED COURSE OUTLINE:**

   I. Preventive Measures
      A. Stress Reduction Protocol
B. Vital Signs
C. Hypertension Urgency & Emergency

II. Clinic Resources and Protocols
A. Contents of Emergency Kit
B. Oxygen Administration
C. Intraocular Foreign Body
D. Broken Instrument Tip

III. Unconsciousness
A. Syncope
B. Orthostatic Hypotension

IV. Altered Consciousness & Seizures
A. Seizures
B. Cerebrovascular Accident
C. Thyroid Emergencies
D. Adrenal Gland Insufficiencies & Crisis
E. Hyperglycemia and Hypoglycemia

V. Cardiovascular Emergencies
A. Angina Pectoris/Myocardial Infarction
B. Heart Failure and Acute Pulmonary Edema
C. Cardiac Pacemaker/Implantable Cardioverter

VI. Respiratory Emergencies
A. Asthma
B. Obstructed Airway
C. Aspiration of a Foreign Object
D. Allergic Reactions
E. Hyperventilation

VII. Drug Overdose & Toxicity

VIII. Other Emergencies
A. Excessive Bleeding Following Extractions
B. Avulsed Tooth
C. Epistaxis
D. Dislocated Jaw
E. Facial Fracture
F. Broken Instrument Tip
G. Foreign Body or Chemical Splash to the Eye

Q. **LABORATORY OUTLINE:** Not applicable