

**Course Outline for:** DENH 1162 Pharmacology for the Dental Hygienist

### A. Course Description

- 1. Number of credits: 2
- 2. Lecture hours per week: 2
- 3. Prerequisites: Acceptance into the Dental Hygiene program
- Corequisites: None
  MnTC Goals: None

The dental hygiene student will obtain pharmacology knowledge pertinent to providing safe and therapeutic clinical dental hygiene care.

# B. Date Last Reviewed/Updated: January 2022

### C. Outline of Major Content Areas

- 1. Deductive Reasoning with Pharmacology
- 2. Drug Information Sources
- 3. Principals of Pharmacology
- 4. Drug Actions, Reactions
- 5. Prescription Application
- 6. Autonomic Drugs
- 7. Analgesics
- 8. Anti-infective Agents
- 9. Anti-fungal, Anti-viral agents
- 10. Anti-anxiety agents
- 11. Pharmacological management of Oral Conditions
- 12. Cardiovascular Drugs
- 13. Anti-convulsant, Psychotherapeutic Agents, Autacoids, and Antihistamines
- 14. Adrenocorticosteroids and other hormones
- 15. Antineoplastic, Respiratory and Gastrointestinal Drugs
- 16. Antiparkinson
- 17. Bisphosphonates
- 18. Herbal and Dietary Supplements
- 19. General Anesthetics
- 20. Drug Interactions
- 21. Emergency Drugs, Medical Emergencies
- 22. Pregnancy, Nursing, Menopause, Osteoporosis
- 23. Drug abuse

## **D. Course Learning Outcomes**

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

- 1. Summarize basic principles involved in pharmacology to include: drug properties, actions, and reactions
- 2. Integrate basic sciences and applied pharmacology.
- 3. Interpret and write a prescription.
- 4. Relate the relevancy of pharmacology to applied clinical dental hygiene.
- 5. Summarize drugs pertinent to the practice of dentistry to include: autonomic drugs, analgesics, anti-infective agents, antifungal and antiviral agents, local and general anesthetics, antianxiety agents, fluorides, herbals and vitamins.
- 6. Comprehend the dental hygienist's role in pharmacologic management of oral conditions and disorders.
- 7. Summarize drugs that may alter dental treatment to include: cardiovascular drugs, anticonvulsants, psychotherapeutic agents, autacoids, and antihistamines, adrenocorticosteroids, other hormones, antineoplastic drugs, respiratory drugs, gastrointestinal drugs, antiparkinson, bisphosphonates, herbals, and dietary supplements.
- 8. Identify drugs which may be useful in dental office emergencies.
- 9. Distinguish possible medical/dental emergencies which may arise during dental treatment due to drug reactions and interactions.
- 10. Comprehend pharmacological concerns with pregnancy, breast feeding, menopause and osteoporosis.
- 11. Describe techniques of general anesthesia in dentistry.
- 12. Distinguish signs of drug abuse.
- 13. Apply pharmacology knowledge to clinical dental hygiene.

### E. Methods for Assessing Student Learning

- 1. Assignments/Worksheets
- 2. Quizzes/Examinations
- 3. Case Studies
- 4. Presentations/Projects

#### F. Special Information

None