# COURSE SYLLABUS

<table>
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<tr>
<th>Course Title:</th>
<th>Pharmacology</th>
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<tr>
<td>Department:</td>
<td>Allied Health</td>
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<td>Curriculum:</td>
<td>Dental Hygiene</td>
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## Course Code: **DHY*264**

**Course Type:** L/D

### Prerequisites:
- C in Dental Hygiene II Theory (DHY*239) and C in Dental Hygiene II Clinic (DHY*240)

### Elective Type:
- G

### Corequisites:
- None

### Other Requirements:
- None

### Catalog Course Description:
Acquaints dental hygiene students with medications used in modern dental practice. Focus is on various drugs, their modes of action, and their principle uses.

## Topical Outline:
- 1. Introduction to pharmacology
- 2. Drug action and handling
- 3. Drug interaction
- 4. Adverse reactions
- 5. Autonomic drugs
- 6. Non-narcotic analgesics
- 7. Opioid analgesics
- 8. Anti-infective agents
- 9. Antimicrobial agents
- 10. Anti-anxiety agents
11. Psychotherapeutic agents
12. Anticonvulsive agents
13. Local anesthesia
14. General anesthesia
15. Cardiovascular drugs
16. Adrenocorticosteroids
17. Antacids/Antihistamines
18. Respiratory drugs
19. Gastrointestinal drugs
20. Emergency drugs
21. Oral condition
22. Hormones
23. Anti-neoplastic drugs
24. Vitamins and minerals
25. Drug abuse

Upon successful completion of this course, the student will be able to do the following:
1. discuss the basic principles of pharmacodynamics and pharmacokinetics
2. describe the drug schedule including abuse potential, handling and examples of drugs in each schedule
3. explain the mechanism of drug interaction and the categories of adverse drug reactions
4. explain the mechanisms of action, pharmacologic effect, adverse reactions, drug interactions, uses, precautions, and contraindication for each drug group; non-narcotics, narcotics, gastrointestinal drugs, cardiovascular drugs, adrenocorticosteroids, autocooids, antihistamines, anti-infectives, antimicrobials, anti-anxiety, psychotherapeutic, cholinergic, anti-cholinergic, adrenergic, adrenergic blocking, anticonvulsant, anti-neoplastic, and respiratory drugs
5. explain the pharmacologic and pharmacokinetic effects of local and general anesthetics
6. define the following terms: psychological and physical dependence, tolerance, withdrawal syndrome, and addiction
7. describe the withdrawal symptoms and withdrawal treatment from narcotic analgesic agents
8. discuss for each vitamin and mineral the major sources, function, R.D.A. deficiency state, toxicity, and clinical considerations
9. discuss female and male sex hormones, pancreatic hormones, pituitary, and thyroid hormones
10. describe the drugs utilized in the treatment of necrotizing gingivitis, herpes labials, aphthous stomatitis, oral candidiasis, xerostomia
11. list and describe the signs, symptoms, and drug/general treatment of each of the following emergency situations: syncope, angina pectoris, asthma, acute myocardial infarction, anaphylactic shock, convulsions, hypo and hyperglycemia, apnea, cardiac arrest
12. Identify drug contents of dental emergency kits

Outcomes:
Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.

PROGRAM: (Numbering reflects Program Outcomes as they appear in the college catalog)

DENTAL HYGIENE A.S. Degree
1. Teamwork and Interpersonal Skills - effectively engages in interpersonal activities and teamwork
### GENERAL EDUCATION:
(Numbering reflects General Education Outcomes as they appear in the college catalog)

**8. Scientific Knowledge** - Students will gain a broad base of scientific knowledge and methodologies in the natural sciences. This will enable them to develop scientific literacy, the knowledge and understanding of scientific concepts and processes essential for personal decision making and understanding scientific issues.

- **Demonstrates**: Consistently recalls and correctly applies discipline-specific terms, relevant theories, laws, and concepts to analyze and explain scientific information.
- **Does Not Demonstrate**: Inconsistently recalls or incorrectly applies discipline-specific terms, relevant theories, laws, and concepts to analyze or explain scientific information.

### Evaluation:
List how the above outcomes will be assessed.

Assessment will be based on the following criteria:
- Quizzes
- Homework
- Exams

### Instructional Resources:
List library (e.g. books, journals, online resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.

- **Required**: course management system
- **Desired**: Textbook(s)

#### Textbook(s)