

**University of Arkansas - Fort Smith**  
**5210 Grand Avenue**  
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**Fort Smith, AR 72913-3649**  
**479-788-7000**

### **General Syllabus**

#### **DHYG 34403 Pharmacology**

Credit Hours: 3

Lecture Hours: 3

Laboratory Hours: 0

Prerequisites: DHYG 21101 Dental Anatomy and Occlusion, DHYG 23103 Radiology, DHYG 24302 Head and Neck Anatomy, DHYG 31002 Pre-Clinical Dental Hygiene, DHYG 31033 Pre-Clinical Hygiene Theory, and DHYG 3412 Oral Embryology and Histology

Corequisites: DHYG 31103 Clinic I Theory, DHYG 32102 Periodontology I, DHYG 32133 Dental Hygiene Clinic I, and DHYG 34503 General and Oral Pathology

Effective Catalog: 2018-2019

#### **I. Course Information**

##### **A. Catalog Description**

Study of the physiologic effects of medications with an emphasis on commonly prescribed medications. The composition, dosage, therapeutic action, use, and effects of drugs related to clinical dentistry and dental hygiene are studied. Emergency treatments for drug hypersensitivity is included.

##### **B. Additional Information-None**

#### **II. Student Learning Outcomes**

##### **A. Subject Matter**

Upon completion of this course, the student will:

1. Discuss the significance of various illnesses and/or drugs as recorded on the medical-dental history. Competencies 1, 2, 3, 4, 6, 7, 8, 9, 10, 11
2. Understand the need and importance of obtaining and using appropriate reference material. Competencies 1, 3, 6, 7, 8, 9, 10, 11
3. Be able to find the necessary information about drugs from reference material. Competencies 1, 3, 6, 7, 8, 9, 10, 11
4. Develop a patient medication history report as used in the clinic. Competencies 1, 4
5. Discuss the relationship between pathological conditions and their therapeutic agents. Competencies 1, 2, 3, 4, 6, 7, 10, 11

6. Discuss therapeutic agents commonly used in the management of the dental patient. Competencies 1, 2, 3, 4, 6, 7, 10, 11
7. Identify and explain the components of a drug prescription. Competencies 1, 2, 3, 4, 6, 7, 10, 11

Refer to *Graduate Competencies* in the Policy and Procedures Manual. These objectives increase knowledge in competencies listed above.

## **B. University Learning Outcomes**

This course enhances student abilities in the following areas:

### **Analytical Skills**

**Critical Thinking Skills:** Students will demonstrate competency in information literacy by utilizing drug reference resources to identify common drug categories. Students will discuss the relationship between pathological conditions and the therapeutic agents within these categories.

### **Ethical Decision Making**

Students will reflect on the professional and ethical responsibilities required to evaluate each patients' unique medical and dental history. Students will demonstrate the ability to address ethical concerns regarding appropriate use of local anesthetic, and current guidelines for antibiotic prophylaxis in the clinical setting.

### **Communication Skills (written and oral)**

Students will practice communication skills through presentations that require creating a case history profile of a patient with a complex medical history. Students will effectively describe the general and oral adverse effects associated with a variety of pharmacologic agents.

## **III. Major Course Topics**

- A. Prescription Writing
- B. Autonomic pharmacology
- C. Adverse Drug Effects
- D. Local Anesthetics/Topical Agents
- E. Non-Opioid and Opioid Agents
- F. Antibacterial Drugs
- G. Antifungal and Antiviral Drugs
- H. Conscious Sedation and General Anesthesia
- I. Drugs for medical emergencies