

# COURSE SYLLABUS



Education That Works For a Lifetime

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| <b>Course Title:</b>  | Pharmacology  | <b>Date submitted:</b>   | March 2022<br>(AAC: 22-14) |  |
| <b>Department:</b>  | Biology, Chemistry, Allied Health   |  |                            |  |
| <b>Curriculum:</b>  | Dental Hygiene  |  |                            |  |
| <b>Course Descriptors:</b><br>Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system. | <b>Course Code:</b> (eg. ACC 101) <input type="text" value="DHY*264"/><br><b>Course Type:</b> <input type="text" value="L/D"/><br>A: Clinical B: Lab D: Distance Learning<br>I: Individual/Independent L: Lecture N: Internship<br>M: Seminar P: Practicum U: Studio<br>X: Combined Lecture/Lab Y: Combined Lecture/<br>Clinical/Lab Z: Combined Lecture/Studio                 | <b>Prerequisites:</b>  |                            |  |
|   | <b>Elective Type:</b> <input type="text" value="G"/><br>AH: Art History E: English FA: Fine Arts G: General<br>HI: History HU: Humanities LAS: Liberal Arts & Sciences<br>FL: Foreign Language M: Math S: Science<br>SS: Social Science   | C in Dental Hygiene II Theory (DHY*239) and C in Dental Hygiene II Clinic (DHY*240)  |                            |  |
|   | <b>Credit Hours:</b> <input type="text" value="3"/><br><b>Developmental:</b> (yes/no) <input type="text" value="No"/><br>Lecture: <input type="text" value="3"/><br>Clinical: <input type="text" value="0"/><br>Lab: <input type="text" value="0"/><br>Studio: <input type="text" value="0"/><br>Other: <input type="text" value="0"/><br>TOTAL: <input type="text" value="3"/> | <b>Corequisites:</b>   |                            |  |
|   | <b>Contact Hours:</b>   | None   |                            |  |
|   | <b>Class Maximum:</b> <input type="text" value="25"/><br><b>Semesters Offered:</b> <input type="text" value="F/Su"/>  | <b>Other Requirements:</b>   |                            |  |
|   |   | None   |                            |  |
|   | <b>Ability Based Education (ABE) Statement</b>  |  |                            |  |
|   | <b>Catalog Course Description:</b>  | Acquaints dental hygiene students with medications used in modern dental practice. Focus is on various drugs, their modes of action, and their principle uses.   |                            |  |
|   | <b>Topical Outline:</b><br>List course content in outline format.   | 1. Introduction to pharmacology<br>2. Drug action and handling<br>3. Drug interaction<br>4. Adverse reactions<br>5. Autonomic drugs<br>6. Nonopioid analgesics<br>7. Opioid analgesics<br>8. Anti-infective agents |                            |  |

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|   | <ol style="list-style-type: none"> <li>9. Antimicrobial agents</li> <li>10. Anti-anxiety agents</li> <li>11. Psychotherapeutic agents</li> <li>12. Anticonvulsive agents</li> <li>13. General anesthesia</li> <li>14. Cardiovascular drugs</li> <li>15. Adrenocorticosteroids</li> <li>16. Antacids/Antihistamines</li> <li>17. Respiratory drugs</li> <li>18. Gastrointestinal drugs</li> <li>19. Emergency drugs</li> <li>20. Oral condition</li> <li>21. Hormones</li> <li>22. Anti-neoplastic drugs</li> <li>23. Vitamins and minerals</li> <li>24. Drug abuse</li> </ol>  |
| <p><b>Outcomes:</b><br/>Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.</p> | <p><b>Upon successful completion of this course, the student will be able to do the following:</b></p> <ol style="list-style-type: none"> <li>1. discuss the basic principles of pharmacodynamics and pharmacokinetics</li> <li>2. describe the drug schedule including abuse potential, handling and examples of drugs in each schedule</li> <li>3. explain the mechanism of drug interaction and the categories of adverse drug reactions</li> <li>4. explain the mechanisms of action, pharmacologic effect, adverse reactions, drug interactions, uses, precautions, and contraindication for each drug group; opioids, nonopioids, gastrointestinal drugs, cardiovascular drugs, adrenocorticosteroids, autacoids, antihistamines, anti-infectives, antimicrobials, anti-anxiety, psychotherapeutic, cholinergic, anti-cholinergic, adrenergic, adrenergic blocking, anticonvulsant, anti-neoplastic, and respiratory drugs</li> <li>5. explain the pharmacologic and pharmacokinetic effects of general anesthetics</li> <li>6. define the following terms: psychological and physical dependence, tolerance, withdrawal syndrome, and addiction</li> <li>7. describe the withdrawal symptoms and withdrawal treatment from opioid analgesic agents</li> <li>8. describe the dental clinician's role in prevention and treatment of an opioid overdose</li> <li>9. discuss for each vitamin and mineral the major sources, function, recommended daily allowance, deficiency state, toxicity, and clinical considerations</li> <li>10. discuss female and male sex hormones, pancreatic hormones, pituitary, and thyroid hormones</li> <li>11. describe the drugs utilized in the treatment of necrotizing gingivitis, herpes labials, aphthous stomatitis, oral candidiasis, xerostomia</li> <li>12. 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</li> <li>13. Identify drug contents of dental emergency kits</li> </ol> <p><b>PROGRAM:</b> <i>(Numbering reflects Program Outcomes as they appear in the college catalog)</i></p> <p><b><u>DENTAL HYGIENE A.S. Degree</u></b></p> |

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| <p><b>Evaluation:</b><br/>List how the above outcomes will be assessed.</p>   | <p><b>Assessment will be based on the following criteria:</b><br/>Quizzes<br/>Homework<br/>Exams</p> |
| <p><b>Instructional Resources:</b><br/>List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.</p> | <p><b>Required:</b> course management system<br/><br/><b>Desired: None</b></p>                       |
| <p><b>Textbook(s)</b></p>   | <p>Haveles, Elena, <u>Applied Pharmacology for the Dental Hygienist</u>, Latest edition</p>          |