### Course Title:
Pharmacology

### Department:
Allied Health

### Curriculum:
Dental Hygiene

### Course Code:
DHY*264

### Course Type:
L/D

### Prerequisites:
- Elective Type: G
- Credit Hours: 3
- Developmental: No
- Lecture: 3
- Clinical: 0
- Lab: 0
- Studio: 0
- Other: 0
- TOTAL: 3

### Corequisites:
None

### Other Requirements:
None

### Class Maximum:
25

### Semesters Offered:
F/Su

### Ability Based Education (ABE) Statement
At Tunxis Community College students are assessed on the knowledge and skills they have learned. The faculty identified the General Education Abilities critical to students' success in their professional and personal lives. In every class, students are assessed on course abilities, sometimes program abilities, and, in most classes, at least one General Education Ability. Students will receive an evaluation of the degree to which they have demonstrated or not demonstrated that General Education Ability.

### 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 principal uses.

### Topical Outline:
- Introduction to pharmacology
- Drug action and handling
- Drug interaction
- Adverse reactions
- Autonomic drugs
### Course Syllabus

#### Outcomes:

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

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, autacoids, 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 narcotizing 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. list the drug contents of dental emergency kits

| 6. Non-narcotic analgesics |
| 7. Opiod 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 |

**Drug abuse**
### 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

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### GENERAL EDUCATION:

(Numbering reflects General Education Outcomes as they appear in the college catalog)

2. Critical Analysis/ Logical Thinking - Students will be able to organize, interpret, and evaluate evidence and ideas within and across disciplines; draw reasoned inferences and defensible conclusions; and solve problems and make decisions based on analytical processes.

   **Demonstrates:** Identifies the issue(s); formulates an argument; explains and analyzes relationships clearly; draws reasonable inferences and conclusions that are logical and defensible; provides support by evaluating credible sources of evidence necessary to justify conclusions.

   **Does Not Demonstrate:** Identifies few or no issues; formulates an argument without significant focus; provides an unclear explanation of analysis and relationships; drawing few reasonable inferences and conclusions that are illogical and indefensible; provides little to no support using credible sources of evidence necessary to justify conclusions.

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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.

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### Evaluation:

List how the above outcomes will be assessed.

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<thead>
<tr>
<th>Assessment will be based on the following criteria:</th>
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<tbody>
<tr>
<td>Quizzes</td>
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<tr>
<td>Homework</td>
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<td>Exams</td>
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### 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:** None

**Desired:** Blackboard Learn

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