



COURSE TITLE: Pharmacology for Dental Hygiene
COURSE NUMBER: DHY 200
PRE-REQUISITES: DHY-101 Oral Hygiene I
DHY-201 Oral Hygiene II
DHY-205 Dental Radiology
DHY-209 Periodontology I
CREDITS: 2
SEMESTER:
MEETING SCHEDULE: Wednesdays, 2:00PM – 5:00PM
COURSE INSTRUCTOR:
Email Address:
Office Phone:
Office Hours: By appointment

COURSE DESCRIPTION

Pharmacology is the study of drugs and how they affect biological systems. Throughout the course of their everyday practice, dental hygienists must frequently draw upon their knowledge of Pharmacology for tasks ranging from the routine, such as obtaining a complete patient medical history and appointment planning, to the extreme, such as handling a medical emergency in the office. In addition to a base of knowledge of pharmacology and the drugs used in the current therapy of disease states, the dental hygienist must also have a solid foundation in the terminology and vocabulary that is associated with pharmacology.

This course examines medications routinely prescribed for medical and dental conditions and the role of the dental hygienist in patient assessment and treatment planning. Systemic medications, complementary medicine, anesthesia, and oral pharmacotherapy will be included. Local anesthetic agents will be emphasized.

COURSE OBJECTIVES/GRADUATE COMPETENCIES

Upon completion of this course, the student should be able to demonstrate Dental Hygiene Program graduate competencies as follows:

Competency	Course Objective
PC.2, PC.3, PC.5	1. Discuss the history of pharmacology and exhibit an understanding of its importance to dental hygiene.
C.7 PC.1, PC.3	2. Identify references of drug information to be used in practice.
PC.2, PC.3	3. Explain basic pharmacokinetics and related factors that affect a drug's ability to produce a therapeutic effect.
C.6, C.10 PC.1, PC.3	4. Recognize the generic and trade names of some of the most commonly prescribed drugs, demonstrate their correct pronunciation and be able to classify them according to their principle therapeutic indications.
C.9, C.13, C.14 HP.3, HP.4, HP.5, HP.6 PC.1, PC.2, PC.3, PC.4, PC.5, PC.6, PC.7, PC.8, PC.9, PC 10, PC.11, PC.12, PC.13	5. Identify a drug listed on an accurately completed patient medical history and explain: <ul style="list-style-type: none"> <input type="checkbox"/> the patient's medical conditions <input type="checkbox"/> the drug's basic mechanism of action and effects <input type="checkbox"/> the drug's potential adverse reactions, interactions and contraindications <input type="checkbox"/> implications and considerations important to patient management during dental treatment
C.3, C.7, C.13 HP.3, HP.4, HP.5, HP.6 PC.2, PC.3, PC.4, PC.5	6. Review the etiology of most common disease states and describe the classes of drugs used in their treatment.
C.5, C.10, C.14 HP.3, HP.4, HP.5, HP.6 PC.1, PC.2, PC.3, PC.4, PC.5, PC.6, PC.7, PC.8, PC.9, PC 10, PC.11, PC.12, PC.13	7. Discuss and compare the classes of drugs used in dental practice for: <ul style="list-style-type: none"> <input type="checkbox"/> local anesthesia <input type="checkbox"/> pain and anxiety management and prophylaxis <input type="checkbox"/> treatment of infection <input type="checkbox"/> treatment of oral conditions.
C.14 HP.6 PC.4	8. Exhibit familiarity with drugs commonly used in the event of a medical emergency in the dental office.
C.2, C. 10, C.12 HP.3	9. Identify those drugs which are commonly abused, discuss the medical, legal and social implications of their abuse, and the impact of their abuse on dental therapy.
C.2	10. Read prescriptions and exhibit familiarity with form and content.

TEXTBOOKS/REFERENCES

- Required : Weinberg, M., Theile, C.W., Fine, J.B., Oral Pharmacology for the Dental Hygienist, 2nd Ed. Pearson Publishing, 2012, ISBN#: 978- 0132559928
- Supplemental: Mosby's Dental Drug Reference, 11th Ed. Elsevier, 2014, ISBN#: 978-0-323-16916-5

COURSE EDUCATIONAL METHODOLOGIES

This course is taught using a variety of teaching methods including:

- Lecture
- PowerPoint Presentations
- Home Reading Assignments
- Homework Assignments
- Quizzes
- Exams
- Research Paper

APPROACHES TO TEACHING

Lecture Periods

During each lecture period, new concepts in pharmacology are presented by a variety of methods including traditional lecture, and collaborative learning techniques. Handouts and visual aids (such as PowerPoint presentations) may be used to assist students in understanding important concepts.

Advance Preparation

Students prepare for each class session by advance reading and review of section(s) of the required textbook to be covered in that class session. Home reading selections from the course required textbook are also assigned to promote individual learning.

Homework Assignments

Students complete homework problems which are designed to strengthen comprehension of the numerous frequently prescribed medications and their uses.

Research Paper

Students complete a research paper to increase the scope of student exposure to new information, promote individual learning and strengthen comprehension of broad concepts.

Quizzes and Examinations

Quizzes and two examinations are administered throughout the semester.

PROCEDURES FOR STUDENT PERFORMANCE EVALUATION

The course instructor will evaluate the performance of each student during the course of the semester according to the following criteria.

Lecture Period Evaluation

Students are expected to attend all lecture periods, arrive no later than the scheduled start time and depart no earlier than the scheduled end time of the lecture period (as indicated in the Attendance Policy section of this syllabus).

Students are required to prepare for each lecture period by reviewing, in advance, the section(s) of the textbook to be discussed during that lecture period as well as any home reading assignments (as indicated in the Curriculum Outline section of this syllabus).

Homework Assignments

Students will complete weekly homework assignments which will consist of identifying the generic name, pharmacologic class and principle therapeutic indication of a selection of the 200 most frequently prescribed brand name drugs.

Homework assignments will be due as indicated in the Curriculum Outline section of this syllabus and must be submitted in electronic format.

Quizzes

Quizzes will be conducted during the first 10 minutes of class sessions as indicated in the Curriculum Outline section of this syllabus.

Each quiz will consist of 10 multiple-choice questions drawn from the previous week's class session, including any supplemental handouts, as well as textbook reading assignments and homework assignments.

Research Paper

Each student will select one herbal product to research for origins, product names, dosage information, efficacy, mechanisms of action, therapeutic indications, adverse effects, dental considerations and interactions with drugs, especially those used in the practice of dentistry.

Research papers will be due as indicated in the Curriculum Outline section of this syllabus and must be submitted in electronic format.

Midterm Examination

The Midterm Examination will be conducted during the first hour of a class session as indicated in the Curriculum Outline section of this syllabus. It will consist of 50 multiple-choice questions, drawn from all material covered from the start of the semester.

Final Examination

The Final Examination will be conducted during two hours of the last class session. It will consist of 100 multiple-choice questions drawn from all material throughout the semester.

PROCEDURES FOR EVALUATION AND GRADING

The course instructor will evaluate the performance and conduct of each student during the course of the semester and will determine the final course grade.

Calculation of Final Grade		Grade Scale	
Lecture Period Evaluation	10%	92% – 100% average	A
Homework Assignments	10%	89% – 91% average	B+
Research Paper	15%	83% – 88% average	B
Quizzes	15%	80% – 82% average	C+
Midterm Examination	20%	75% – 79% average	C
Final Examination	30%	<74% average	F

Please Note:

- A minimum grade of 75 is required to pass this course
- No extra-credit assignments will be given
- Additional criteria used in the determination of the final course grade are found in the Course Policies section of this syllabus.

COURSE POLICIES

Attendance Policy

Regular attendance in all lecture periods is expected and is the responsibility of the student. Participation in lecture period group discussions and collaborative problem-solving exercises (as indicated in the Lecture Period Evaluation section of this syllabus) requires the student's presence in the classroom.

1. Students assume all responsibility for academic loss incurred through absenteeism, lateness or early departures. Students are responsible for all subject matter presented or assigned during their absence.
2. All absences, lateness and early departures will be considered unexcused, except only in circumstances where a valid reason for such has been established (at the sole discretion of the course instructor).
3. Each unexcused lecture period absence, lateness or early departure will result in a one-point reduction from the final course grade.

Class Session Conduct Policy

Students are required to put their cell phones on silent status and power off all other electronic devices during classroom instruction and activities. No student will be permitted to use cell phones during instructional or quiz/examination times. Recording devices are not permitted in this course.

Quiz/Examination Policy

1. Quizzes/examinations will not be returned to students for their review and answers will not be discussed in class until all students complete the quiz/examination. Students are required to schedule an appointment with the course instructor if they wish to review answers individually and/or discuss any questions.
2. Lateness
 - a. Prompt arrival for quiz/examination periods is the responsibility of the student. Quizzes/examinations will be distributed and administered at the start of the scheduled periods (as indicated in the Curriculum Outline section of this syllabus).
 - b. Late arriving students will be required to complete quiz/examination within the scheduled time remaining.
3. Early Departure
 - a. No one is to leave class during an exam without handing in their work. Upon leaving, students will not be allowed to re-enter the room until the quiz/examination is over.
4. Absence
 - a. Students are responsible to know when quizzes/examinations are scheduled (as indicated on the course website and in the Curriculum Outline section of this syllabus).
 - b. Students who miss a quiz/examination will receive a grade of zero (0).
 - c. The decision to excuse a missed quiz/examination and administer a make-up is solely that of the course instructor. A missed quiz/examination will be excused only if a valid reason can be established.
 - d. If a valid reason has been established, at the discretion of the course instructor, the student may be allowed to take a make-up quiz/examination for up to full credit.
 - e. If a valid reason has not been established, at the discretion of the course instructor, the student may be allowed to take a make-up quiz/examination with a mandatory 20 point penalty imposed. Therefore, the maximum grade that may be obtained on any such make-up quiz/examination is an 80.
 - f. The make-up quiz/examination will be administered at a mutually agreeable time for the student and course instructor, at the final discretion of the course instructor.

Academic Integrity Policy

The Bergen Community College Dental Hygiene Program will adhere to the Academic Integrity Policy, which is stated in the Bergen Community College Catalog. Violation of academic integrity may be defined to include the following: cheating, plagiarism, falsification and fabrication, abuse of academic materials, complicity in academic dishonesty, and personal misrepresentation.

It is the student's responsibility to be aware of the behaviors that constitute academic dishonesty. Please refer to the Bergen Community College Catalog for more information.

Electronic Communication Policy

This course is Moodle enhanced. Students are responsible for all course content delivered in class, presented on the course website and distributed via e-mail. In the rare event that class is cancelled, students are responsible for all material that would have been presented in that class, as indicated on the course website.

Class materials will be distributed electronically via the course website. Students who desire a hard copy are responsible for downloading and printing all such documentation.

Student Support Services

Students are encouraged to use the student support services provided by the College. These services include the Tutoring Center (L-125) and the Office of Specialized Services (S-131). Every effort will be made to ensure classroom and laboratory access for all students. Students who require accommodations in accordance with the Americans with Disabilities Act (ADA) can request these services from the Office of Specialized Services. To learn more about how to apply for services, please visit them at: <http://www.bergen.edu/oss>

CURRICULUM OUTLINE

Class Session	Class Date	Quiz	Class Session Content
Class #1		Quiz #1 (Open)	Introduction to Pharmacology Drug Action and Handling
Class #2		Quiz #2	Drug Action and Handling
Class #3		Quiz #3	Autonomic Pharmacology
Class #4		Quiz #4	Cardiovascular Pharmacology
Class #5		Quiz #5	Midterm Examination (1 hour) Gastrointestinal Pharmacology
Class #6		Quiz #6	Respiratory Pharmacology Pharmacology of Pain Relief
Class #7		Quiz #7	Pharmacology of Pain Relief
Class #8		Quiz #8	Anti-Infective Pharmacology
Class #9		Quiz #9	CNS Pharmacology Endocrine Pharmacology
Class #10		Quiz #10	Research Papers Due Final Examination

NOTE: Every attempt will be made to follow this syllabus. The course instructor reserves the right to make changes as necessary. Some content may not be included as both class time and student progress permits.

Bergen Community College
 DHY200 Dental Pharmacology
 Semester Research Report Evaluation Rubric

Objective Criteria	Unsatisfactory Performance	Satisfactory Performance	Excellent Performance	Outstanding Performance	Maximum Points
Content	0	5	10	20	20
<input type="checkbox"/> Accuracy of Research <input type="checkbox"/> Amount of Research	<input type="checkbox"/> Most material presented is inaccurate. <input type="checkbox"/> Subject is not well researched, missing key facts and dental implications (if any).	<input type="checkbox"/> Some material presented is accurate. <input type="checkbox"/> Subject is fairly well researched, missing several key facts and dental implications (if any).	<input type="checkbox"/> Most material presented is accurate. <input type="checkbox"/> Subject is well researched, missing only one or two key facts and dental implications (if any).	<input type="checkbox"/> All material presented is accurate. <input type="checkbox"/> Subject is very well researched, missing no key facts and dental implications (if any).	
Form	0	5	10	20	20
<input type="checkbox"/> Organization <input type="checkbox"/> Sequence <input type="checkbox"/> Structure	<input type="checkbox"/> Information presented is completely disorganized. <input type="checkbox"/> No discernable sequence of ideas. <input type="checkbox"/> Ideas are not fully developed, no recognizable introduction and/or conclusion.	<input type="checkbox"/> Information presented is somewhat disorganized. <input type="checkbox"/> Ideas are presented in incomplete sequences. <input type="checkbox"/> Ideas are somewhat developed, introduction and conclusion are incomplete and not in expected order.	<input type="checkbox"/> Information presented is organized. <input type="checkbox"/> Ideas are presented in some sequence. <input type="checkbox"/> Ideas are developed and flow somewhat smoothly from introduction to conclusion in expected order.	<input type="checkbox"/> Information is very organized. <input type="checkbox"/> Ideas are presented in complete sequence. <input type="checkbox"/> Ideas are fully developed and flow smoothly from introduction to conclusion in expected order.	
Format	0	5	10	20	20
<input type="checkbox"/> MLA/APA Format	<input type="checkbox"/> Material is not presented in MLA/APA format.	<input type="checkbox"/> MLA/APA format is followed loosely throughout.	<input type="checkbox"/> MLA/APA format is followed throughout with some exceptions.	<input type="checkbox"/> MLA/APA format is followed closely throughout.	
Technical Writing	0	5	10	20	20
<input type="checkbox"/> Spelling, Grammar	<input type="checkbox"/> Numerous spelling, grammar and punctuation errors.	<input type="checkbox"/> Several spelling, grammar and punctuation errors.	<input type="checkbox"/> One or two spelling, grammar and punctuation errors.	<input type="checkbox"/> No spelling, grammar or punctuation errors.	
References	0	5	10	20	20
<input type="checkbox"/> Bibliography	<input type="checkbox"/> No bibliography present.	<input type="checkbox"/> Bibliography is present but includes only one Internet reference.	<input type="checkbox"/> Bibliography is present but includes only one traditional reference and one Internet reference.	<input type="checkbox"/> Bibliography is present and includes several traditional and Internet references.	
Total Points					100