COURSE: NUR 106  
EFFECTIVE DATE: January 2015  
NEXT REVIEW DATE: January 2016

TITLE: Pharmacology  
CREDITS: 2  
CONTACTS: CLASS - LAB - TOTAL

PREREQUISITES: NUR 101, BIO 210 with a grade of “C” or better.

CO-REQUISITE: NUR 120

DESCRIPTION: This introductory course outlines the basic concepts of pharmaceutics, pharmacokinetics, pharmacodynamics, and pharmacotherapeutics. The process of clinical calculations is introduced as well as the major drug classifications.

TEXTBOOK(S) OR ALTERNATIVE:  


MATERIALS (specifying those to be purchased by student): Textbook, basic calculator for doing math equations

COLLATERAL READING: To be assigned

CLASS MANAGEMENT ACTIVITIES (Attendance, tardies, testing, etc.):  
Academic Dishonesty: NETC honors the state SCTCS Student Code with regard to Academic Dishonesty. Students should read the NETC College Catalog and Associate Degree Nursing Program Handbook. A copy of the Student Code is available at www.netc.edu.

Statement on Written Assignments: The instructor reserves the right to refuse any paper, which is messy or unreadable, or appears to be copied. Incorrect grammar and spelling errors will be noted. Papers will be graded on the basis of content, organization, grammar, and neatness.

Attendance and Tardy Policy:  
Classroom: Students are expected to attend all class meetings. If a student must be absent, it is the student’s responsibility to notify the instructor, no later than one hour prior to the class scheduled meeting. No more absences are allowed than the number of hours the course meets per week; however, extenuating circumstances may be considered. It is the student’s responsibility to obtain any information missed. For example, if a class meets 2 days per week, the student may miss (2) classes. This class meets once a week, therefore students may miss only one class this semester.

Clinical: This class does not have a scheduled clinic.
Classroom and Clinical Tardy: Tardy is defined as arriving to the classroom after the assigned start time. More than ten (10) minutes tardy will be considered an absence. If a student leaves more than ten (10) minutes prior to the class dismissal, he or she may be considered absent unless prior arrangements have been made with the instructor. Three tardies are equivalent to one absence in the classroom.

Testing/Final Exam: There will be no retests. Makeup tests will be allowed only for valid excuses for missing the examination and prior contact is made. A grade of “F” may be recorded for any test missed. If a problem should arise, a test may be taken early at a time established by the instructor. To be eligible to make up a test, the student must contact the instructor one hour prior to the class time of the day of the test is issued. The student may leave a phone message or e-mail explaining their situation and the timestamp on message must meet the deadline stated in the previous sentence. The instructor will return the call or respond to the e-mail indicating if the excuse is acceptable and the day and time the test can be taken. If the student is allowed to make up the test, they are expected to make up the missed test on their first day back to school. Failure to do so will result in a grade of zero (0) for that test. The test will be left in the Success Center or designated area by the instructor. The student will need to present their student ID badge in order to take the test. The instructor reserves the right to administer a full discussion test or a test other than the original test.

Classroom Etiquette: An integral part of an education is developing a sense of integrity and responsibility, not only toward instructors, but also toward other students. In the classroom, as on the job or in your home, exhibiting appropriate behavior reflects on your maturity. Arriving late to class, being unprepared, inappropriate talking while class is in session, etc. negatively reflects on fellow students. Please be considerate. If you elicit disruptive behavior during class, you may be asked to leave the classroom setting by your instructor and receive a (0) zero for that day or be counted absent for the day.

Electronic Devices: All electronic devices (cell phones, pagers, etc.) must be turned off during class/clinical time. These devices are not part of the instructional environment and may be confiscated by the instructor if utilized during these times. If a student is a member of emergency preparedness, there must be authorization from the Dean of Student Services to keep the device on during these times. If you are using an e-book during this class, notify your instructor or you will not be allowed to have your electronic device out during class time. Recorders are prohibited during class unless you have a medical excuse from a medical doctor for a condition that has been previously stated on your physical assessment form. Cell phones are not allowed in clinical sites as requested by the clinical sites.

Identification Badges: The College requires that student’s wear their Northeastern Technical College Identification Badge at all times while
on campus and within the clinical setting areas. Failure to wear ID badge may result in the student not being allowed to enter into the classroom or clinical setting.

**Disabilities Statement:**
Students with disabilities are encouraged to contact the Dean of Student Services to discuss needs or concerns as they pursue an academic program and participate in campus life. The Dean of Student Services will provide guidance regarding official documentation of disabilities and/or accommodation of needs. (See College Catalog)

**RESOURCES (A-V, persons, tools/equipment):**
1. Lecture/Discussion
2. Demonstrations and return demonstrations
3. Audiovisuals and computer simulations
4. Handouts
5. Written assignments
6. Tests
7. Role playing
8. Assigned reading
9. Independent study
10. Library research activities
11. Educational resource testing and remediation as assigned

**COURSE TOPICAL OUTLINE** (List topics and sub-topics of course) and Calendar or approximate length of time devoted to topic.

**TENTATIVE SCHEDULE**

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<th>WEEK</th>
<th>TOPICS</th>
<th>CHAPTERS</th>
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| 1    | Introduction to Drugs and Drug Administration | Review of Syllabi, Web Enhancement materials, online resources, etc.  
1. Drugs/Agents and Factors Affecting Their Action (2)  
2. Principles and Methods of Drug Administration (43)  
NCLEX Review: Silvestri Ch. 5 & 17  
Appendix 5, Appendix 6  
P 1448 & 1449 – Abbreviations and Their Meanings  
P 1450 – Abbreviations of Selected Drug Classifications  
P 1441 & 1442 – Table B and Table C |
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| 2    | Introductions to Drugs and Drug Administration | 3. Intravenous Drug Therapy (80)  
 |      |        | 4. Calculating Medication Dosages (105)  
 |      |        | 5. Drug Therapy for Pediatric Clients (123)  
 |      |        | 6. Drug Therapy for Older Adult Clients (143)  
 |      |        | NCLEX Review: Silvestri Ch. 14, 49, & 21 |
| 3    | Agents That Interfere With Microbial Growth | 7. Antibacterial Agents and Antiviral Agents (159)  
 |      |        | 8. Antifungal Agents and Antiparasitic Agents (251)  
 |      |        | 9. Antiseptics and Disinfectants (274)(167)  
 |      | TEST # 1 (week 1 & 2) |  
| 4    | Agents Used to Control Pain and Inflammation | 10. Analgesic and Antipyretic Agents (298)  
 |      |        | 11. Anesthetic Agents (359)  
 |      |        | 12. Anti-Inflammatory Agents (394)  
 |      |        | 13. Agents Used to Treat Hyperuricemia and Gout (434)  
 |      | TEST # 2 (week 3 & 4) |  
| 5    | Agents Used to Treat Respiratory Health Alterations | 14. Antihistamines, Nasal Decongestants, Expectorants, and Antitussives (449)  
 |      |        | 15. Bronchodilators and Other Respiratory Agents (479)  
 |      |        | NCLEX Review: Silvestri Ch. 59  
| 6    | Agents Used to Treat Cardiovascular Health Alterations | 16. Antiarrhythmic Agents. Cardiac Stimulants and Depressants (508)  
 |      |        | 17. Agents that Dilate Coronary Blood Vessels (547)  
 |      |        | NCLEX Review: Silvestri Ch. 61  
| 7    | Agents Used to Treat Cardiovascular Health Alterations | 18. Diuretics and Antihypertensives (568)  
 |      |        | 19. Agents Used to Treat Hyperlipidemia (619)  
 |      |        | 20. Agents Affecting Blood Clotting (638)  
 |      | TEST # 3 (week 5 & 6) |  

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| 8    | Agents Used to Treat Nutritional Alterations | 21. Agents Used to Treat Anemias (674)  
22. Vitamins, Minerals, and Other Nutritional Agents (691)  
23. Agents Used to Treat Hyperacidity and Gastroesophageal Reflux Disease (722)  
24. Antiemetics and Emetics (746)  
25. Laxatives and Antidiarrheals (762) |
|      | Agents Used to Treat Gastrointestinal Health Alterations | NCLEX Review: Silvestri Ch. 57 |
| 9    | Agents Used to Treat Neurological Health Alterations | 26. Central Nervous System Sedatives and Hypnotics (781)  
27. Anxiolytics and Other Agents Used to Treat Psychiatric Health Alterations (806)  
28. CNS Stimulants and Agents Used to Treat Attention-Deficit, Hyperactivity Disorder and Alzheimer’s Disease (863) |
|      | TEST # 4 (week 7 & 8) | NCLEX Review: Silvestri Ch. 67 |
| 10   | Agents Used to Treat Neurological Health Alterations | 29. Agents Used to Treat Musculoskeletal Health Alterations (887)  
30. Agents Used to Treat Parkinson’s Disease (919)  
31. Agents used to Treat Seizures/Epilepsy (938) |
| 11   | Agents Used to Treat Neurological Health Alterations | 32. Substance Abuse (973)  
33. Agents Affecting the Autonomic Nervous System (1005) |
|      | TEST # 5 (week 9 & 10) | |
| 12   | Agents Used to Treat Endocrine Health Alterations (1022) | 34. Agents Affecting Thyroid, Parathyroid, and Pituitary Function (1023)  
35. Agents Used to Treat Hyperglycemia and Hypoglycemia (1052) |
|      | | NCLEX Review Questions: Silvestri: Ch. 55 |
The course topical outline is a planned tentative outline; the instructor reserves the right to add to or delete as needed and in the best interest of the student learner.

**COURSE COMPETENCIES/LEARNING OUTCOMES/OBJECTIVES:**

Student will be able to:

**Caring**

1. Describe the concepts of the nursing program that include caring, communication, critical thinking, teaching and learning process and professionalism.
2. Relate the application of the nurse responsibility, nursing process and principles of administration of medications to promote adaptation of clients across the life span in selected healthcare situations.
3. Differentiate medication administration concepts across the life span.
4. Identify health beliefs, cultural, issues, and other psychosocial aspects related to medication administration and drug therapy.

Communication
1. Relate the importance of communication in terms of safety, ethical and legal implications, technology, in the effectiveness of drug therapy.
2. Discuss the role of the nurse in documenting and reporting medications.

Critical Thinking
1. Describe the concepts of pharmaceutics, pharmacokinetics, pharmacodynamics, and pharmacotherapeutics of drugs.
2. Demonstrate accurate dosage calculations.
3. Describe the relationship between drug actions, interactions, side effects, dosages, anticipated effects, and optimal responses for selected pharmacotherapeutic agents and drug classifications.
4. Plan nursing interventions necessary when administering multiple drugs to patients.
5. Identifies herbal supplements that may interfere with pharmacology agents.
7. Relate medications as they affect one or more of the patient’s systems.
8. Identify basic pharmacology safety measures when administering select drugs, i.e. anesthetics, central nervous depressants, narcotics, sedatives, anticoagulants.

Teaching and Learning
1. Selects patient teaching content and principles used when giving select drugs.
2. Explain a teaching plan for a patient receiving drug therapy.

Professionalism
1. Select safety and environmental factors that promote and protect health.
2. Identifies cost containment issues in pharmacotherapy.

COLLEGE WIDE COMPETENCIES:
1. Identify and use sources of information by utilizing information processing skills compatible with job demands in a computer-literate society.
2. Solve problems incorporating effective decision-making, reasoning and creativity.
3. Apply mathematical/computational skills to solve problems.
4. Practice interpersonal skills and teamwork in their lives and chosen careers.
5. Perform professional/technical skills which are appropriate and ethical for their chosen disciplines.

**INSTRUCTIONAL METHODS:**
1. Lecture/discussion
2. Audiovisuals
3. Handouts
4. Tests
5. Assigned reading
6. Independent study
7. Case study analysis

**ASSESSMENT TOOLS:**
1. Objective tests 70%
2. ATI Practice tests A&B 5%
3. Silvestri NCLEX Review 5%
4. Final Exam - ATI Test 20%
5. ATI remediation as needed

**GRADING SCALE:**
- A 93 - 100 4 Grade Points
- B 86 - 92 3 Grade Points
- C 78 - 85 2 Grade Points
- D 70 - 77 1 Grade Points
- F 69 & below 0 Grade Points

**ATI Comprehensive Test Grading System for Final Exam:**
- Level 3 - 100 (20 points)
- Level 2 - 90 (18 points)
- Level 1 - 60 (12.0 points)
- Below Level 1 - (No points will be awarded for this score)

Points above calculated on the 20% scale

Upon completion of this course, the student should have established a basic understanding and application of pharmacology and drug therapy as to its relationship to nursing. The student should be able to utilize the knowledge and skills in providing optimal client care across the life span using health teaching and communication skills.

**GUIDELINES FOR NUR 106 STUDENTS:**
- a. All written work must have your name on it if you want to get credit for your work.
- b. One half (1/2) point will be taken off for each misspelled word. This applies if the same word is misspelled more than once.
- c. Students are expected to be fully prepared for each class.
- d. Assignments are to be turned in at the assigned time. If you are unable to turn in the assignment, make arrangements to have the assignment turned in for you. Each day your assignment is late 5 points will be deducted from the assignment grade.
- e. There is to be no drinking or eating in the classroom or computer area. Bottled water will be allowed in the classroom setting.
f. Students are required to perform designated exam of Saunders Comprehensive Review for NCLEX-RN Companion CD-ROM Pharmacology exam with a minimum scoring of 85% as assigned. Results of all exams are to be turned into your instructor by the date designated in your course outline. The score will count as a quiz grade.

g. Students are required to perform designated ATI Practice Test A & B on Pharmacology for this semester. Results of these exams are to be turned into your instructor by the date designated in your course outline. The scores will be calculated together and will count as a quiz grade.

h. Students are required to take ATI Comprehensive Exam for Pharmacology at a date designated by the instructor near the end of the semester. The level scored on these test will be counted as a Final Test Grade according to the grading scale listed above for ATI Comprehensive Testing Final Grade. This test will only be administered once. No retakes will be allowed. (Exception: If for any reason, the nursing committee deems you should be allowed to retake your final exam, you will not be given the ATI version of this exam. Your final exam will involve a written exam developed by the class instructor.) The ATI Final Exam is based on material from the ATI Pharmacology textbook and not class textbook.

i. Tests Review: All tests will be graded and returned for in-class review no later than two (2) weeks after the date of administration. If the student wishes to review a test in greater detail, the student should make an appointment with the instructor to do so. Students will have one (1) week to review tests, contest an item on the test, or contest the test grade. After the week has passed, the grade is considered final.

j. All students should have access to Moodle on-line program. If you don’t have access or having difficulty with your access, notify Moodle Administration for assistance. Everyone should be accessing Moodle with their STUDENT.NETC.EDU address.

k. You will need to monitor your Moodle account frequently for information regarding your classes, assignments, and messages. If you don’t have a computer at home, you can access your account from any of the NETC satellite sites located in Pageland, Bennettsville, and Dillon.

l. My office phone number is (843) 921-6969, email address is mhope@netc.edu. I have office hours posted on my door in room 807C. I will also post a signup sheet for anyone needing to meet with me for any reason.

m. The instructor reserves the right to assign a project to be done in this class. Details and dates will be announced later in the semester.