AHS121
Surgical Pharmacology
Spring 2014

Course Description
AHS 121 Basic Pharmacology
Lecture, 2 Lab, 0; Cr. 2

This course covers the nature of drugs, their actions in the body, side effects, and introductory aspects of anesthesia.
Prerequisite: SUR 101, SUR 110, AHS 130, BIO 112 and acceptance into Surgical Technology Program.
Corequisite: SUR 103, SUR 104, SUR 106, ENG 101, PSY 201, AHS 103, and CPT 101 or CPT 170.

Course Focus
This course covers the nature of drugs, their actions in the body and side effects.

Text and References

OBJECTIVES/LEARNING OUTCOMES
1. Identify the actions and side effects of drugs commonly used in the surgical setting.
2. Apply fractions, decimals, percentages, ratios and proportions, conversions, and measurement systems to medication dosage and administration.
3. Employ accepted medical terminology regarding medication usage and administration.
4. Describe proper preparation and management of medications and solutions in the surgical setting.

COURSE TOPIC OUTLINE:
1. Basic Mathematics
2. Basic Pharmacology
3. Medication Development, Regulation and Resources
4. Medication Administration
5. Antibiotics
6. Diagnostic Agents
7. Diuretics
8. Hormones
9. Medications that Affect Coagulation
10. Ophthalmic Agents
11. Fluids and Irrigation Solutions
12. Antineoplastic Chemotherapy Agents
13. Preoperative Medications
14. Patient Monitoring and Local and Regional Anesthesia
15. General Anesthesia
16. Emergency Situations

CONTENT OUTLINE:
A. Medication measurements
B. Terminology
C. Types of medication actions/effects
D. Abbreviations
E. Medication/solution violations
F. Laws, policies and procedures
G. Medication publications
H. Sources of medications
I. Pharmaceutical preparations
J. Routes of administration
K. Care and handling of medications and solutions
L. Medications used in surgery
   1. Analgesics
   2. Narcotics
   3. Narcotics antagonists
   4. Analgesic antipyretic agents
   5. Sedative-hypnotic agents
   6. Tranquilizers
   7. Anticonvulsants
   8. Central nervous system stimulant
   9. Antiemetics and antihistamines
   10. Cardiac medications
   11. Autonomic agents
   12. Coagulants and hemostatic agents
   13. Anticoagulants and fibrinolytics
   14. IV fluids
   15. Blood replacement
   16. Diuretics
   17. Ophthalmic medications
   18. Gastric medications
   19. Obstetrical agents
   20. Hormones
   21. Anti-infective agents

22. Contrast media
23. Antineoplastic chemotherapy
24. Dyes
25. Irrigation solutions

COURSE GOALS
The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal)
1. calculate medication conversions
2. calculate medication dosage
3. apply general terminology to medication use
4. describe anesthesia agents actions
5. critique perioperative care for patients receiving general anesthesia
6. discuss postoperative medication selection factors
7. identify actions of drugs commonly used in the surgical setting
8. list perioperative medications
9. prepare solutions commonly used in the surgical setting*
10. manage solutions in the surgical setting*
11. manage medications in the surgical setting*
12. prepare preoperative information checklist*
13. list prescribed preoperative medications*
14. prepare medications commonly used in the surgical setting*
15. discuss preoperative medication selection factors
16. explain preoperative medication
17. list common anesthetic drugs
18. differentiate anesthesia types
19. discuss anesthesia agent selection factors
20. define common anesthetic drug differences
21. describe anesthesia patient factors
22. compare anesthesia methods
23. describe anesthetic agents administration
24. address anesthesia monitoring
25. differentiate general anesthesia phases
26. explain circulator administration of anesthesia role
27. apply anesthesia administration principles
28. explain scrub administration anesthesia role
29. identify preoperative information
30. indicate local agent complications*
31. address general anesthesia complications
32. indicate regional agent complications*
33. indicate spinal agent complications*
34. identify side effects of drugs commonly used in the surgical setting
STUDENT CONTRIBUTIONS
Classes are designed to employ a variety of teaching techniques. In order to maximize learning, required readings should be done prior to class. If a student is falling behind in academic achievement, it is imperative to seek immediate assistance from the instructor.

COURSE EVALUATION
3 exams (10%) 30
1 final exam (15%) 15
11 quizzes (5%) 55
100

Course Schedule
Monday: 10:00am-12:00pm
Building # 4 Room 124

ADA STATEMENT
The Technical College of the Lowcountry provides access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation, contact the counselor for students with disabilities at (843) 525-8228 during the first ten business days of the academic term.

ATTENDANCE
The College’s statement of policy indicates that students must attend ninety percent of total class hours or they will be in violation of the attendance policy.

1. Students not physically attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.

2. Students taking an online/internet class must sign in and communicate with the instructor within the first ten calendar days from the start of the semester to indicate attendance in the class. Students not attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.

3. Reinstatement requires the signature of the division dean.
   a. In the event it becomes necessary for a student to withdraw from the course OR if a student stops attending class, it is the student’s responsibility to initiate and complete the necessary paperwork. Withdrawing from class may have consequences associated with financial aid and time to completion.
   b. When a student exceeds the allowed absences, the student is in violation of the attendance policy. The instructor MUST withdraw the student with a grade of “W”, “WP”, or “WF” depending on the date the student exceeded the allowed absences and the student’s progress up to the last date of attendance.
   c. under extenuating circumstances and at the discretion of the faculty member teaching the class, allow the student to continue in the class and make-up the work. This exception must be documented at the time the allowed absences are exceeded.
   d. Absences are counted from the first day of class. There are no "excused" absences. All absences are counted, regardless of the reason for the absence.
4. A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.

5. Students are expected to be in class on time. Arrival to class after the scheduled start time or leaving class prior to dismissal counts as a tardy. Three tardies and/or early departures are considered as one absence unless stated otherwise.

6. It is the student's responsibility to sign the roll/verify attendance with instructor upon entering the classroom. Failure to sign the roll/verify attendance results in a recorded absence. In the event of tardiness, it is the student's responsibility to insure that attendance is marked. The student is responsible for all material/announcements presented, whether present or absent.

7. Continuity of classroom and laboratory (which includes clinical experiences) is essential to the student's progress in providing safe and competent patient care. Students are expected to use appropriate judgment for participating in clinical activities. To evaluate the student's knowledge and skills, it is necessary for the student to be present for all clinical experiences. If absence does occur, the designated clinical site, in addition to the Division of Health Sciences Administrative Assistant, must be notified by telephone no later than 30 minutes prior to the start of the clinical experience. The Division of Health Sciences telephone number is 843-525-8267.

8. Absences from the clinical area are strongly discouraged. The attendance policy applies to clinical activities. “No call, no show” for clinical is unprofessional conduct and the student will be withdrawn from the program with a WF.

A copy of TCL’s STATEMENT OF POLICY NUMBER: 3-1-307 CLASS ATTENDANCE (WITHDRAWAL) is on file in the Division Office and in the Learning Resources Center.

HAZARDOUS WEATHER
In case weather conditions are so severe that operation of the College may clearly pose a hardship on students and staff traveling to the College, notification of closing will be made through the following radio and television stations: WYKZ 98.7, WGCO 98.3, WGZO 103.1, WFXH 106.1, WWVV 106.9, WLOW 107.9, WGZR 104.9, WFXH 1130 AM, WLVH 101.1, WSOK 1230 AM, WAEV 97.3, WTOC TV, WSGS TV, WJWJ TV, and WSAV TV. Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. www.tcl.edu/textalert.asp

ACADEMIC MISCONDUCT
There is no tolerance at TCL for academic dishonesty and misconduct. The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship.

It is the student's responsibility to address any questions regarding what might constitute academic misconduct to the course instructor for further clarification.

The College adheres to the Student Code for the South Carolina Technical College System. Copies of the Student Code and Grievance Procedure are provided in the TCL Student Handbook, the Division Office, and the Learning Resources Center.
Health care professionals hold the public trust. Academic misconduct by health science students calls that trust into question and academic integrity is expected.

It is a fundamental requirement that any work presented by students will be their own. Examples of academic misconduct include (but are not limited to):

1. copying the work of another student or allowing another student to copy working papers, printed output, electronic files, quizzes, tests, or assignments.
2. completing the work of another student or allowing another student to complete or contribute to working papers, printed output, electronic files, quizzes, tests, or assignments.
3. viewing another student’s computer screen during a quiz or examinations.
4. talking or communicating with another student during a test.
5. violating procedures prescribed by the instructor to protect the integrity of a quiz, test, or assignment.
6. plagiarism in any form, including, but not limited to: copying/pasting from a website, textbook, previously submitted student work, or any instructor-prepared class material; obvious violation of any copyright-protected materials.
7. knowingly aiding a person involved in academic misconduct.
8. providing false information to staff and/or faculty.
9. entering an office unaccompanied by faculty or staff.
10. misuse of electronic devices.

GRADING POLICY

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<td>90% - 100%</td>
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Grading Methodology. The final grade must be 75.000 or more in order to pass the course and progress in the program. Students absent from an examination or presentation will receive a “0” grade for the examination unless other arrangements are made with the individual instructor prior to the examination or presentation day or on the examination or presentation day before the test/presentation is scheduled to be given. It is the responsibility of the student to contact the appropriate instructor to arrange to make up the examination. Arrangements may be completed by telephone. If the instructor is not available, a message should be left on the instructor’s voice mail AND with another member of the faculty or administrative assistant. The instructor will decide the time and method of make-up examinations on an individual basis. Messages sent by other students are unacceptable. The student is responsible for notifying the instructor for the reason of the absence. Grades are posted on Blackboard within one week of administration of tests and examinations.

COURSE POLICIES/PROCEDURES

1. It is clearly to the advantage of the student to attend class regularly. Test materials are weighted heavily in favor of lecture materials.
2. **All cell phones and pagers must be turned off during class (lecture and laboratory periods).** No pagers or phones are allowed in the clinical area. No exceptions are made to this rule.

4. Instructors will excuse a student from class who disrupts the class.

5. No course grades are posted in public areas. Grades are available through WebAdvisor. The student must go to the college’s website [www.tcl.edu](http://www.tcl.edu) Select current student then select TCL WebAdvisor and find: (1) the directions and a demonstration on how to log in to WebAdvisor, and (2) how to access grades. For questions, contact the TCL Help Desk at 525-8344 or the Registrar’s office at 525-8210.

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