

This is a SouthArk Master Syllabus. The course syllabus distributed by the instructor may include additional requirements, must be followed by the student in the given term, and is considered to supersede the Master Syllabus.

Course Number

PRNS 1102

Course Title

Pharmacology I

Course Description

This course is designed to prepare the student nurse to safely and accurately prepare and administer drugs to the infant, child, and adult. Emphasis is placed on implication for nursing care. This course includes a brief review of math/conversions, introduction to pharmacology, methods of drug administration, along with formulas for calculating drug dosages and side effects/adverse reactions of medication administration to observe for.

College Mission

South Arkansas Community College promotes excellence in learning, teaching, and service; provides lifelong educational opportunities; and serves as a cultural, intellectual, and economic resource for the community.

College Wide Student Learner Outcomes

Critical Thinking

Responsibility

Communication

ACTS Course

Program Course

Practical Nursing

ACTS Outcomes

Practical Nursing Program Student Learner Outcomes

1. Collaborate professionally with faculty, clients and their families and/or significant others, supervisors, peers, and with all members of the health care team (Affective).
2. Promote pride, concern and interest in the health and well-being of the community and its citizens (Cognitive, Affective, Psychomotor).
3. Demonstrate proficiency of learned scientific principles and integrate these concepts in the practice of safe, competent care throughout the lifespan of the consumer (Psychomotor, Cognitive, Affective).
4. Practice clear, effective communication skills, both written and non-written (Psychomotor Affective).
5. Create documentation that effectively communicates patient condition and care provided (Psychomotor, Cognitive).
6. Apply use of hardware and software technologies to retrieve, process, and analyze theoretical and practical health care information (Cognitive, Psychomotor).
7. Examine and incorporate the state's scope of practice guidelines, rules, regulations, and ethical standards in the practice of nursing (Cognitive, Affective).

Course Outcomes

CLO #	Course Outcomes	Unit Outcomes/ Competencies	ACTS	Program Outcomes	Critical Thinking	Communication	Responsibility	Assessment
CLO 1	Demonstrates safe medication administration using the six rights.	2,3,15, 19, 20, 21,22,23. 24,25,26		3, 4, 7	CT 1		R 2	Simulated Skills Laboratory Pharmacology Check-off, Practicum Evaluation Tool Semester 2:2, Practicum Evaluation Tool Semester 3:10

CLO 2	Perform accurate medication calculations with 100% accuracy	1,2,3		3,	CT 2		R 2	Simulated Skills Laboratory Pharmacology Check-off
CLO 3	Demonstrate knowledge of commonly used drugs in the treatment of illness, including: usual dosages, outcomes, adverse reactions/side effects, and contraindications	4, 5, 7, 8, 11, 12, 13, 16		3, 4, 5, 7	CT 1			Practicum Evaluation Tool Semester 2:2 Practicum Evaluation Tool Semester 3:10
CLO 4	Define controlled substance schedule and identify drugs in each category	5, 6		3, 4, 5, 7	CT 1			Practicum Evaluation Tool Semester 2:2

Unit Outcomes/ Competencies

After completion of this course the student should be able to:

1. Successfully perform basic mathematical equations.
2. Correctly convert between metric, apothecary, and household measurement systems.
3. Correctly calculate drug dosages using mathematical process.
4. Be familiar with terms associated with Pharmacology.
5. Give the legal implications of administering medications.
6. Define the five controlled substances' schedules, give examples of drugs listed in each and describe nursing responsibilities associated with the administration of each type.
7. List the factors that affect drug dosages.
8. Define the actions of drugs, the factors that affect drug action, and describe the undesirable action or of drugs.
9. Recognize and appropriately respond to allergic reactions to medications and or treatments.
10. Define the types of medication orders.
11. State the essential information that is included on a medication order.
12. Demonstrate knowledge of medication labels.
13. Demonstrate knowledge of proper procedures for handling adverse drug reactions and signs to monitor patient for in relation to the different type of drug reactions.
14. List types of medication errors and the proper procedure to follow in the event of a medication error.
15. State the "Rights" of proper drug administration and demonstrate this in Pharmacology Lab check-off (See Pharmacology Check-off Section)
16. Properly use available drug reference resources.
17. Demonstrate knowledge of proper storage, handling, care and record keeping of medications including controlled substances.
18. List symptoms of oxygen toxicity.
19. Identify the component parts of syringes and needles.
20. Demonstrate the safety guidelines to follow in the use of syringes and needles.
21. Demonstrate knowledge in the proper selection of syringes and needles for each type of parenteral medication administration.
22. List the advantages and disadvantages/potential complications associated with administration of parenteral medications.
23. Demonstrate knowledge of selecting correct sites for intramuscular, subcutaneous, and intradermal injections and be able to describe and name the anatomical locations for each.
24. Describe and demonstrate knowledge of the Z-track method of intramuscular injections and in what circumstances it is used.
25. Demonstrate and describe special considerations to be observed when administering insulin and heparin medications.
26. Demonstrate accurate and safe preparation, administration, and documentation of medication administration.
27. Discuss the role of specific electrolytes in maintaining homeostasis.
28. Discuss active and passive transport.
29. Discuss excesses and deficits of fluids and electrolytes.
30. Differentiate the role of buffers and the acid-base balance.
31. Discuss the four types of acid-base imbalances.
32. Complete IV Therapy Course

33. Demonstrate knowledge of drugs commonly used in the treatment of illnesses, including such information as usual dosages, expected outcomes, side effects/adverse reactions, contraindications, and points of observation following the administration of medications, for all body systems/drug classifications.

IV Therapy Course Outline

A three-day course of theory and clinical skills lab

1. Introduction to IV therapy
 - a. Learning Objectives
 - b. Benefits and Risks of IV therapy
 - c. Overview of IV Policies
 - d. Legal Responsibilities
2. Fluids and Electrolyte Review
 - a. Discuss excesses and deficits of fluids and electrolytes.
 - b. Differentiate the role of buffers and the acid-base balance.
 - c. Discuss the four types of acid-base imbalances.
 - d. IV solutions
3. The Specifics
 - a. Anatomy and Physiology of the layers of the skin
 - b. Site Selection
 - c. Equipment
 - d. Performing venipuncture
4. Videos
 - a. The Basics of IV therapy
 - b. Initiating IV venipuncture
5. Nursing Skills Lab
 - a. Demonstration of venipuncture techniques
 - b. Securing the IV site
 - c. Routine care and monitoring of the IV site
 - d. IV dressing changes
 - e. Documentation
 - f. IV arm Simulator
 - g. Skills practice
 - h. Questions and Answers
6. IV Pump and tubing
 - a. Pump set-up and operation
 - b. IVPB
 - c. Blood and Blood Products
 - d. Review for IV check-offs
 - e. IV math calculations
 - f. IV check-offs

Assessment Description(s)

Practicum Evaluation Tool 2 and 3

Materials and Technological Requirements

Asperheim, M. K. (2012). Introduction to Pharmacology. 12th edition St. Louis: Saunders: Elsevier. ISBN 9781437717068

deWitt, S. (2014). Fundamental Concepts and Skills for Nursing. St. Louis: Saunders: Elsevier. ISBN 978-1-4377-2746-3

deWitt, S. (2014). Fundamental Concepts Skills For Nursing Study Guide, 4th edition, saunders-Elsevier, St. Louis. ISBN 978-1-4557-0845-1

Williams & Wilkins (2009). IV Therapy Incredibly Easy. 4th edition, Philadelphia: Lippincott. ISBN 9781605471983

Lippincott (2015). Nursing 2015 Drug Handbook (4th ed.). Lippincott. ISBN 9781469837444

Lynn. Lippincott's Photo Atlas of Medication Administration (5th ed.). Lippincott. ISBN 9781451194319

ATI resource materials

Class Attendance Policy

Students are expected to attend all classes in which they are enrolled. If a student is absent from a class session, it is the student's responsibility to make arrangements to complete or make up any work missed. No make-up work for missed classes will be allowed without the approval of the instructor. Students who enroll late must assume all responsibility for work missed. Classes not attended as a result of late enrollment may be counted toward excessive absences. Students not attending the entire class period may be counted absent for that period. An instructor may drop students with a grade of "WE" if students have been absent for an excessive number of days. Warning letters will be sent to the students advising them of the consequences of nonattendance and urging them to contact their instructors immediately. Excessive absences are defined as follows:

Regular Semester

- Courses which meet once a week.....2 absences
- Courses that meet twice per week3 absences
- Courses that meet four times per week.....5 absences

Summer Session

- Courses that meet four times per week in a five week session3 absences
- Courses which meet two evenings per week in a 10 week session.....3 absences

Students enrolled in special programs or individualized instruction should contact their program director/instructor regarding specific attendance requirements for the program/course. Some of the selective-admission, health-science programs have specific criteria regarding attendance. Students are encouraged to refer to program policies in these matters.

Jury Duty/Military/Official School Function

Scheduled absences are those that occur due to college-related activities or as a result of summons to jury duty or military duty. Classes missed as a result of scheduled absences will not be counted as excessive absences if the instructor is notified and provided documentation prior to the absence(s). Make-up work for scheduled absences will be at the discretion of the instructor.

In all instances, documentation must be provided to the instructor within 24 hours of receipt. Documentation should come from an appropriate party on letterhead or other official stationery with a signature and contact information. Documentation should list the corresponding dates of the leave.

Medical leave

For medical-related absences, documentation must include written notice from the treating medical professional documenting time needed off related to medical reasons and time student may resume classes. The medical reason does not need to be listed on the documentation; the documentation must include only that there is a medical reason, the amount of time the student needs to be absent, and the time the student should be able to return to classes. Students who elect to work at home while on excused leave must meet with their instructors to make arrangements to do so. Working on coursework while on medical leave is not a requirement but can be requested by students. If students request that they be allowed to work at home while on an excused leave, the instructor will make every reasonable effort to ensure that the student is able to do so.

For students who have a medical condition necessitating time off or accommodation:

- 1) They may work at home on assignments if they choose to if on medical leave approved by a medical professional
- 2) Receive appropriate accommodations related to coursework (i.e., excused from labs with potentially harmful chemicals, have a larger desk, etc.)
- 3) Resume their studies where they left off once they return to classes
- 4) Be allowed to make up any missed work related to medical leave
- 5) Receive incompletes on their transcripts until coursework is completed, according to the incomplete grade contract.
- 6) Be given a reasonable time frame in which to complete missed coursework

Academic Honesty Policy

Students enrolled at South Arkansas Community College are expected at all times to uphold standards of integrity. Students are expected to perform honestly and to work in every way possible to eliminate academic dishonesty. Academic dishonesty includes cheating and plagiarism, which are defined as follows:

- Cheating is an attempt to deceive the instructor in his/her effort to evaluate fairly an academic exercise. Cheating includes copying another student's homework, class work, or required project (in whole or in part) and/or presenting another's work as the student's own. Cheating also includes giving, receiving, offering, and/or soliciting information on a quiz, test, or examination.

- Plagiarism is the copying of any published work such as books, magazines, audiovisual programs, electronic media, and films or copying the theme or manuscript of another student. It is plagiarism when one uses direct quotations without proper credit or when one uses the ideas of another without giving proper credit. When three or more consecutive words are borrowed, the borrowing should be recognized by the use of quotation marks and proper parenthetical and bibliographic notations.

If, upon investigation, the instructor determines that the student is guilty of cheating or plagiarism, the following penalties will apply:

- The student will receive a penalty of no less than a zero on the work in question.
- The instructor will submit a written report of the incident to the Vice President for Learning
- The Vice President for Learning will determine whether further disciplinary action will be taken.
- All decisions may be appealed for review through the college's Academic Appeals procedure.

Equal Opportunity-Affirmative Action Statement

South Arkansas Community College does not discriminate on the basis of age, race, color, creed, gender, religion, marital status, veteran's status, national origin, disability, or sexual orientation in making decisions regarding employment, student admission, or other functions, operations, or activities.

Library Services

Library Homepage: <http://southark.libguides.com/homepage> Library Contact: LibraryStaff@southark.edu or 870.864.7115

Procedures to Accommodate Students with Disabilities:

If you need reasonable accommodations because of a disability, please report this to the Vice President of Student Services with proper documentation. VPSS Contact: 870.875.7262

The Early Alert System

In an effort to ensure student retention and success, South Arkansas Community College employs an Early Alert System to identify and support at-risk students as soon as possible in a given semester. The intent of Early Alert is to provide this assistance while there is still time to address behaviors or issues that have the potential of preventing students from completing their courses and degree plans. Students referred through the Early Alert System will be required to work on a corrective action plan with their student advising coach and to include attendance accountability and mandatory academic tutoring either in the academic division or in the Testing and Learning Center (TLC).

Once the Student Advising Coach has met with the referred student, and again when the student has met the prescribed corrective actions, the coach will update the Early Alert System so that the instructor is kept informed of the progress in resolving issues.

Behavioral Review Team

At South Arkansas Community College (SouthArk), we are committed to proactive leadership in student wellbeing and campus safety. By focusing on prevention and early intervention with campus situations that involve any person experiencing distress or engaging in harmful or disruptive behaviors, the BRT will serve as the coordinating hub of existing resources to develop intervention and support strategies and offer case management. Students, faculty, staff, and campus guests are encouraged to report any person on campus who is a concern. BRT Contact: 870.875.7262
BRT@southark.edu

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