

**NEOSHO COUNTY COMMUNITY COLLEGE
MASTER COURSE SYLLABUS**

COURSE IDENTIFICATION

Course Code/Number: ALHE 104

Course Title: Certificate Medication Aide

Division: Applied Science (AS) Liberal Arts (LA) Workforce Development (WD)
 Health Care (HC) Lifetime Learning (LL) Nursing Developmental

Credit Hour(s): Five (5)

Effective Date: Fall 2013

Assessment Goal Per Outcome: 75%

COURSE DESCRIPTION

This course includes the study of medications and their physiological effect on the body. Emphasis will be placed on the identification and abbreviation of drugs, weights and measures, and procedures used in dispensing medication. The curriculum is approved by the Kansas Department of Health and Environment. CMA may not be eligible for federal financial aid.

MINIMUM REQUIREMENTS/PREREQUISITES AND/OR COREQUISITES

Must be a Certified Nurse's Aide in the State of Kansas

CASAS Reading test with passing score.

The student must be 18 years of age by the ending date of the course.

An individual must be 18 years of age to be certified as a medication aide.

TEXTS

The official list of textbooks and materials for this course is found on *myNeosho*.

<http://www.neosho.edu/ProspectiveStudents/Registration/CourseSyllabi.aspx>

GENERAL EDUCATION OUTCOMES

1. Practice Responsible Citizenship through:
 - identifying rights and responsibilities of citizenship,
 - identifying how human values and perceptions affect and are affected by social diversity,
 - identifying and interpreting artistic expression.
2. Live a healthy lifestyle (physical, intellectual, social) through:
 - listing factors associated with a healthy lifestyle and lifetime fitness,
 - identifying the importance of lifetime learning,
 - demonstrating self-discipline, respect for others, and the ability to work collaboratively as a team.
3. Communicate effectively through:
 - developing effective written communication skills,
 - developing effective oral communication and listening skills.
4. Think analytically through:
 - utilizing quantitative information in problem solving,
 - utilizing the principles of systematic inquiry,
 - utilizing various information resources including technology for research and data collection.

COURSE OUTCOMES/COMPETENCIES (as Required)

COURSE OUTCOMES

1. Student demonstrates and understands rationale of basic infection control.
2. Student demonstrates an understanding of different drug families and identifies the action, side effects and name of each drug.
3. Student demonstrates an understanding of different ways to safely administer drugs and how to treat unsafe drug/food and drug/drug interactions.

COURSE COMPETENCIES

By the end of the course the student will be able to demonstrate the ability to:

1. Identify the responsibility of the medication aide to self and to residents.
2. Identify legal implications of medication aide's role.
3. Identify means for terms, which describe unwanted medication reactions.
4. Name factors that influence medication action and identify their effects.
5. Identify definitions for forms in which medication is available and implications for effective use.
6. Use common medical abbreviations.
7. Read and write lower case Roman numerals from ½ to 30.
8. Read decimals
9. Add fractions and decimals
10. Write the abbreviations for units of measurement in the metric, apothecaries and household systems when given the name, and vice versa.
11. Organize in order of relative size units of measurement in the metric, apothecaries and household systems.
12. Identify the meaning of the initials U.S.P. following a drug name.

13. Differentiate between generic and brand names for drugs.
14. Identify names of resources for drug information
15. Demonstrate the ability to use these references.
16. Identify the basic structure and functions of the cardiovascular system.
17. Identify the action and major side effects of digitalis drugs.
18. Name commonly used digitalis drugs.
19. Identify measures, which help ensure safe administration of digitalis drugs.
20. Identify the action and major side effects of anti-anginal drugs.
21. Name commonly used anti-anginal drugs.
22. Identify measures, which promote drug action and ensure resident safety.
23. Identify the action, side effects and names of anti-arrhythmic drugs.
24. Identify implications for care when anti-arrhythmic drugs are given.
25. Identify the actions and major side effects of anti-hypertensive drugs.
26. Name commonly used anti-hypertensive drugs.
27. Identify measures to monitor drug effect and to ensure resident safety.
28. Identify the action and main side effect of anti-coagulant medication.
29. Name a commonly used anti-coagulant.
30. Identify measures, which help detect or prevent complications.
31. Identify basic structures and functions of the urinary system
32. Identify the actions and major side effects of diuretics.
33. Name commonly used diuretics.
34. Identify nursing actions to monitor the diuretic's actions, to observe for complications and to promote comfort for the patient.
35. Identify the reason potassium replacement drugs are used.
36. Name commonly used K replacement drugs.
37. Identify nursing actions to prevent medication reactions.
38. Identify drugs, which increase and decrease bladder tone.
39. Identify drugs, which are used to treat urinary tract infections and nursing measures to promote effectiveness.
40. Identify the basic structures and functions of the respiratory system.
41. Identify reasons for O₂ administration, toxic effects, and nursing actions to prevent toxicity and maintain safety.
42. Identify the action, use, and side effects of bronchodilator drugs.
43. Name drugs with bronchodilator action
44. Identify ways to minimize the side effects of bronchodilator drugs.
45. Identify actions, use, side effects, and names of anti-histamines.
46. Identify implications for care when anti-histamines are used.
47. Identify the expected actions, side effects, and implications for care when respiratory combination products are used.
48. List structure and function of parts of digestive system.
49. Name drugs, actions, side effects and implications for care for medications, which reduce stomach acidity.
50. List action, side effect, and examples of drugs, which treat nausea and vomiting.
51. Name examples and side effects of antidiarrheal medications according to their action.
52. State non-drug means of controlling diarrhea.
53. List examples, side effects, action, and speed of action for drugs, which promote defecation.

54. State non-drug methods to help prevent and correct constipation,
55. State what functions vitamins (in general) have in the body.
56. State a situation when vitamin supplements may be used.
57. Name examples of vitamin supplements.
58. State what iron is necessary for in the body.
59. State measures to use in administering iron to minimize side effects.
60. Identify action and example of calcium medication.
61. List parts of the central nervous system and their function.
62. Identify names and side effects of drugs stimulating the central nervous system, and implications for care.
63. List drug names, actions, and side effects, for narcotic analgesics.
64. Discuss factors in administration of analgesics, which enhance their effect.
65. Discuss non-drug measures for relieving pain.
66. Identify action, names and side effects of non-narcotic analgesics.
67. Name action, names, and side effects, and examples of drugs, which are sedative/hypnotic.
68. State action, side effects, and examples of tranquilizers.
69. Name action, side effects, and examples of tranquilizers.
70. Discuss implications for care for the person receiving tranquilizers.
71. Name action, side effects, and examples for medication treating manic-depressive disorders, and implications for care.
72. Explain what is meant by a placebo.
73. Write the action and side effects of ergot alkaloid.
74. Name parts and functions of bones, joints, and muscles.
75. Name drugs, their actions, use, side effects and implications in treatment of musculoskeletal disorders.
76. List action, side effects and names of drugs replacing thyroid hormones.
77. Describe how the body malfunctions in diabetes, and what changes occur in the urine of an untreated diabetic.
78. Identify diet, activity and medication as treatments of diabetes.
79. State name, action, side effects of oral hypoglycemic agents.
80. State causes, symptoms, emergency response to hypoglycemia and diabetic acidosis.
81. State action, side effects, and names of male and female hormones used as medication.
82. List names, action, use, and side effects of adrenocorticosteroids, and implications for care.
83. Identify cause, control measures, signs and symptoms of infection.
84. Identify terms describing topical ant-infective action.
85. Name topical ant-infective agents and identify actions, which promote effective use.
86. Identify anti-infective drugs, their use, side effects and implications for care.
87. Identify basic structures and functions, terms, and abbreviations referring to the eye.
88. Identify the names, action and side effects of drugs used to treat glaucoma.
89. Identify measures, which help ensure safety for the resident with glaucoma.
90. Identify action-use and name for eye lubricant.
91. Identify a reason anti-infective drugs may be used in the eye and examples of drugs used.
92. Identify parts of ear and their function.
93. Name action, and side effects of drugs affecting the ear and implications for care.
94. List parts and functions of skin.
95. Identify actions, side effects and examples of drugs affecting the skin.

96. Identify ways in which medication is supplied to the nursing home.
97. Identify ways in which medications may be stored.
98. Use order verification system to check medication orders.
99. Identify and demonstrate ways to prevent transfer of infection.
100. Identify and demonstrate ways to set up medications accurately.
101. Identify potential sources of error, and safety checks, which help prevent error.
102. Identify and demonstrate specific techniques to set up medications accurately.
103. Identify potential sources of error.
104. Identify drugs, which may require special controls and record keeping. Name controls, which may be used.
105. Identify and demonstrate ways to administer drugs safely and effectively by the following routes:
 - Oral
 - Respiratory
 - Oxygen
 - Inhaler
 - Nebulizer
 - Rectal
 - Vaginal
 - Eye
 - Ear
 - Skin
106. Identify general guidelines for follow in recording medication administration.
107. Identify appropriate recording procedures when medication is given at times other than regularly scheduled or when errors are made.

MINIMUM COURSE CONTENT

The following topics must be included in this course. Additional topics may also be included.

- I. Introduction
 - A. Role and responsibilities of the Medication Aide
 - B. Pharmacodynamics
 - C. Forms in which medication is available.
 - D. Common Medical Abbreviations.
 - E. Mathematics, Weights and Measures
 - F. Drug Standards and Names
 - G. Resources for Drug Information
- II. Medications
 - A. Drugs Affecting the Cardiovascular System.
 - B. Drugs Affecting the Urinary System
 - C. Drugs Affecting the Respiratory System
 - D. Drugs Affecting the Digestive System
 - E. Drugs Affecting the Central Nervous System
 - F. Drugs Affecting the Musculoskeletal System

- G. Drugs Affecting the Endocrine System
 - H. Antibiotics and Other Anti-Infective Agents
 - I. Drugs Affecting the Eye
 - J. Drugs Affecting the Ear
 - K. Drugs Affecting the Skin
- III. Administering Medications
- A. Preparing to Administer Medications
 - B. Methods of Medication Administration
 - C. Recording Medication Administration
- IV. Practicum: Clinical Experience and Evaluation

STUDENT REQUIREMENTS AND METHOD OF EVALUATION

INSTRUCTIONAL METHODS

All manner and means of instruction techniques will be used: lecture, problem solving, role-playing, group participation, audio/visual aides, clinical experiences, and observation.

STUDENT REQUIREMENTS

Students are expected to be responsible, sociable, self-managing and resourceful; integrity and honesty are monitored within the social context of the classroom. A formal clinical evaluation will include the following criteria;

1. Demonstrates knowledge of medications
2. Prevents transfer of infection
3. Prepares medication accurately
4. Administers medication accurately and effectively
5. Provides for the safety of medication
6. Records medications and observations appropriately using medication cards and notes.

THIS CLASS REQUIRES THE STUDENT TO HAVE A GRADE OF 75% OR GREATER TO PASS THE CLASS AND TO BE ELIGIBLE TO TAKE THE CMA STATE TEST. AN INDIVIDUAL MUST BE 18 YEARS OF AGE TO BE CERTIFIED AS A MEDICATION AIDE.

GRADING SCALE

A=90-100% B=80-89% C=75-79% D=60-74% F <60%

ASSESSMENT OF STUDENT GAIN

Participants will enter the course with a certain level of understanding of medication actions, side effects, and administration procedures. Their level of understanding will be assessed with a pre-evaluation and post-evaluation to show gain or lack thereof.

Attendance Policy

1. NCCC values interactive learning which promotes student engagement in the learning process. To be actively engaged, the student must be present in the learning environment.
2. Unless students are participating in a school activity or are excused by the instructor, they are expected to attend class. If a student's absences exceed one-eighth of the total course duration, (which equates to one hundred (100) minutes per credit hour in a face-to-face class) the instructor has the right, but is not required, to withdraw a student from the course. Once the student has been dropped for excessive absences, the registrar's office will send a letter to the student, stating that he or she has been dropped. A student may petition the chief academic officer for reinstatement by submitting a letter stating valid reasons for the absences within one week of the registrar's notification. If the student is reinstated into the class, the instructor and the registrar will be notified. Please refer to the Student Handbook/Academic Policies for more information
3. Absences that occur due to students participating in official college activities are excused except in those cases where outside bodies, such as the State Board of Nursing, have requirements for minimum class minutes for each student. Students who are excused will be given reasonable opportunity to make up any missed work or receive substitute assignments from the instructor and should not be penalized for the absence. Proper procedure should be followed in notifying faculty in advance of the student's planned participation in the event. Ultimately it is the student's responsibility to notify the instructor in advance of the planned absence.

ACADEMIC INTEGRITY

NCCC expects every student to demonstrate ethical behavior with regard to academic pursuits. Academic integrity in coursework is a specific requirement. Definitions, examples, and possible consequences for violations of Academic Integrity, as well as the appeals process, can be found in the College Catalog, Student Handbook, and/or Code of Student Conduct and Discipline.

ELECTRONIC DEVICE POLICY

Student cell phones and other personal electronic devices not being used for class activities must not be accessed during class times unless the instructor chooses to waive this policy.

NOTE

Information and statements in this document are subject to change at the discretion of NCCC. Students will be notified of changes and where to find the most current approved documents.

ACCOMMODATIONS

If you are a student with a disability who may need accommodation(s), in compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990, please notify the Dean of Student Services in the Student Services Office, Sanders Hall, 620-432-0304, on the Chanute Campus, or the Dean for the Ottawa and Online Campuses, 785-248-2798, on the Ottawa Campus as soon as possible. You will need to bring your documentation for review in order to determine reasonable accommodations, and then we can assist you in arranging any necessary accommodations.

NON-DISCRIMINATION POLICY

The following link provides information related to the non-discrimination policy of NCCC, including persons with disabilities. Students are urged to review this policy.

<http://www.neosho.edu/Departments/NonDiscrimination.aspx>

SEXUAL MISCONDUCT POLICY (TITLE IX)

At NCCC, it is the responsibility of an instructor to help create a safe learning environment in the classroom, including both physical and virtual classrooms. All instructors are considered mandatory reporters at NCCC, therefore any information regarding sexual misconduct that is shared by a student in one-on-one meetings with the instructor must be reported to appropriate personnel at the College. Instructors will keep the information private to the greatest extent possible, but it is not confidential. Generally, climate surveys, classroom writing assignments or discussions, human subjects research, or events such as Take Back the Night events do not provide notice that must be reported to the Coordinator by employees, unless the reporting party clearly indicates that they wish a report to be made.

The following link provides information related to the sexual misconduct policy of NCCC, including resources, reporting options, and student rights. Students are urged to review this policy.

<http://www.neosho.edu/TitleIX.aspx>

COURSE NOTES