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AHXR 101.01: Patient Care in Radiology

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MISSOULA COLLEGE, UNIVERSITY OF MONTANA

RADIOLOGIC TECHNOLOGY PROGRAM

AHXR 101 Patient Care in Radiography

Fall 2018 Credits: 2

Instructor: Dan Funsch

E-Mail: dan.funsch@mso.umt.edu **Phone:** (406) 239-6488 (cell)

Office: 420

Office Hours: Mon - Fri: 7 - 9 am

RELATIONSHIP TO PROGRAM

Students will learn the special nursing skills necessary to care for patients in an imaging department. Students will be challenged to use critical thinking to provide quality care for patients and when facing legal and ethical issues.

COURSE DESCRIPTION

Introduction to the concepts and practices necessary to provide quality patient care in the diagnostic imaging department. Course covers legal and ethical standards of care, basic nursing practices, infection control, venipuncture, and etc, as well as medications and contrast agents used in radiology.

PREREQUISITES: Students must have completed all Program pre-requisites

REQUIRED TEXT: Patient Care in Radiography with an Introduction to Medical Imaging, Ninth Edition, Ruth Ann Ehrlich and Dawn M. Coakes. ISBN 9780323353762

STUDENT ASSESSMENT AND GRADING

The final grade will be based on:

- Quizzes & Exams
- Participation/attendance
- Required competencies

Grading Scale:

100 -90 = A

89 - 80 = B

79 - 70 = C

69 - 60 = D

Academic Conduct

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or disciplinary sanction by the University.

All students need to be familiar with the Student Conduct Code. The Code is available for review online at http://www.umt.edu/SA/VPSA/index.cfm/page/1321.

students with disabilities will receive appropriate accommodations in this course when requested in a timely way. Please be prepared to provide a letter from your DSS Coordinator.

ATTENDANCE POLICY: All students are expected to come to class each, on time. Cell phones must be turned off. Constructive participation is expected. Disruptive behavior will not be tolerated.

*Syllabi are subject to change

Note: Students must pass this course with a "B" (80%) to remain in the Radiology Technology Program.

STUDENT LEARNING OBJECTIVES & OUTCOMES

Upon completion of this course, the student will be able to:

- 1. Explain perceptions of dying and death from the viewpoint of both patient and radiographer.
- 2. Describe the characteristics of each stage of grief.
- 3. Explain the age-specific considerations necessary when performing radiographic procedures.
- 4. Describe appropriate procedures for management of various types of trauma situations.
- 5. Describe the symptoms and medical interventions for a patient with a contrast agent reaction.
- 6. Explain the role of the radiographer in patient education.
- 7. Describe the patient preparation for contrast studies.
- 8. Identify specific types of tubes, lines, catheters and collection devices.
- 9. Outline the steps in the operation and maintenance of suction equipment.
- 10. Outline the steps in the operation and maintenance of oxygen equipment and demonstrate proper use.
- 11. Describe the steps in performing various mobile procedures.
- 12. Describe the special problems faced in performing procedures on a patient with a tracheotomy and specific tubes, drains and catheters.
- 13. Describe the procedure for producing diagnostic images in the surgical suite.
- 14. Explain the appropriate radiation protection required when performing mobile/surgical radiography.
- 15. Distinguish among the chemical, generic and trade names for drugs in general.
- 16. Describe pharmacokinetic and pharmacodynamic principles of drugs.
- 17. Explain the uses and impact of drug categories on the patient.
- 18. Define the categories of contrast agents and give specific examples for each category. Explain the pharmacology of contrast agents.
- 19. Describe methods and techniques for administering various types of contrast agents.
- 20. Identify and describe the routes of drug administration.
- 21. Demonstrate appropriate venipuncture technique. Differentiate between the two major sites of intravenous drug administration.
- 22. Identify, describe and document complications associated with venipuncture and appropriate actions to resolve these complications.
- 23. Discuss the various elements of initiating and discontinuing intravenous access.
- 24. Differentiate and document dose calculations for adult and pediatric patients.
- 25. Prepare for injection of contrast agents/intravenous medications using aseptic technique.
- 26. Explain the current legal status and professional liability issues of the radiographer's role in contrast and/or drug administration.
- 27. Students will achieve competencies in the following patient care skills:
 - a. CPR/BLS Certification
 - b. Vital signs blood Pressure
 - c. Vital signs Temperature
 - d. Vital signs Pulse
 - e. Vital signs Respiration
 - f. Vital signs Pulse Oximetry
 - g. Sterile & Medical Aseptic Technique
 - h. Venipuncture
 - i. Transfer of Patient
 - j. Care of patient medical equipment (oxygen tank, IV tubing, etc)

AHXR 101 Weekly Class Schedule – Fall 2018

| Week of | CLASS ACTIVITY | Assignment |
|--------------|--|--|
| August 28 | Class Introduction | |
| September 4 | Sept 5: Ergonomics training with Physical therapy students | Purchase textbook, read Chapter 1 |
| September 11 | In class lecture on Chapter 1 | Friday 9/12 IPE event 1-4 pm UC Ballroom |
| September 18 | SEPT 17: 8 am lecture on Blood Born Pathogens | |
| | SEPT 18: Vital signs I with Ann McCloud-Sneath | |
| September 25 | Vital signs II with Ann McCloud-Sneath | |
| October 2 | Vital signs III with Ann McCloud-Sneath | |
| October 9 | In class lecture on Chap | Friday 10/14 Career Fair 9:30-11:30 |
| October 16 | In class lecture on Chap | |
| October 23 | | |
| October 30 | | |
| November 6 | In class lecture on Chap | |
| November 13 | In class lecture on Chap | |
| November 20 | In class lecture on Chaps | |
| November 27 | In class lecture on Chaps | |
| December 4 | Last day of class | |

| December 11 | Final Exam | Study for final |
|-------------|------------|-----------------|
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