Midland College  
Syllabus  
Fall, 2008  
RADR 1409  
Introduction to Radiography and Patient Care  
(2-2-0)

Course Description: This course includes the historical development of radiography, basic radiation, protection, an introduction to medical terminology, ethical and legal issues for health care professionals, and an orientation to the program and to the health care system. Patient assessment, infection control procedures, emergency and safety procedures, communication and patient interaction skills, and basic pharmacology are also included. Prerequisite: Admission to Radiography Program.

Text, References, and Supplies: Ehrlich, McCloskey and Daly. "Patient Care in Radiography", 7th edition. Lecture notes. LRC readings from selected texts list on outline.

Course Goals/Objectives: The following list of course goals will be addressed in this course. These goals are directly related to the performance objectives.

1. explain the program and clinical policies as outlined in the student handbook  
2. state the basic radiation protection practices and guidelines for staff and patients  
3. demonstrate the proper and safe method of patient transfer  
4. display safe radiation protection practice for yourself and the patient in the clinical setting  
5. describe the life cycle of a radiograph  
6. demonstrate proper safe handling and use of radiographic equipment  
7. describe the career ladder for a technologist in radiology  
8. display ethical principles in the treatment of patients in the clinical setting  
9. identify the basic components of diagnostic radiographic equipment  
10. identify the components of a radiographic console  
11. interpret the ethical guidelines adopted by the ASRT  
12. explain the function of a radiographer as a health care provider  
13. construct a hospital organizational chart  
14. contrast the effects that attitude and communication have on patient care  
15. define blood pressure, pulse and temperature  
16. demonstrate the ability to take a patient's blood pressure, pulse and count respirations  
17. explain why contrast medias are used in diagnostic radiology  
18. demonstrate the proper mixing of barium for both upper GIs and barium enemas  
19. identify the basic components to an emergency crash cart  
20. demonstrate the proper method of drawing up an intravenous contrast media  
21. apply proper infection control techniques in the administering of intravenous contrast  
22. identify the common medications used in radiology for contrast reactions  
23. identify the different types of contrast used in a radiology department  
24. describe the possible acute situations that may arise in a radiology department  
25. describe the patient signs and symptoms that may indicate an onset of an acute situation  
26. analyze the function of a technologist during acute situations  
27. explain why a patient preparation is needed for some radiographic procedures.
examinations
27. describe the proper patient preparation for specific radiographic examinations
28. determine the proper order of completion for multiple radiographic examinations
29. define the different aspects of infection control
30. describe the different requirements for entering an isolation room
31. demonstrate sterile technique
32. explain reverse isolation
33. describe the basic image qualities
34. explain the basic components of radiographic technique
35. apply basic technique principles
36. construct a mAs chart to be used in the clinical setting
37. address the medicolegal considerations involved in patient care
38. explain the concepts of critical thinking and problem solving
39. demonstrate critical thinking and problem solving skills
40. explain the difference in individual, social and professional ethics and values

Student Contribution and Class Policies:

Attendance is critical in this class. Students must obtain a 70% average for the course to remain in the program. Make-up exams are given with a 10% reduction in score unless prior arrangements have been made with the instructor to take exam early. All missed exams must be made up by the end of the next regular class day attended or no credit will be awarded for the exam. All late homework receives a 10% reduction in score each day it is late. Reading should be done prior to class, and not all material from text will be covered in lecture but may appear on unit or final exam. The instructor reserves the right to enact a closed door policy. Should late arrival to class be a problem then students will not be allowed to enter class once lecture has started.

Students are strongly encouraged to seek help with material during office hours. During off hours the instructor may be reached at home. 699-0408

Evaluation of Students:

All grades are based on a standard percentage and not curved. Final grades are composed of:

- Unit exams 55%
- Labs and assignments 20%
- Final exam 25%
- Plus Extra Credit

Extra Credit. Students participating in Student Bowl receive an additional 1% added to their final course grade. Students on the winning team receive 2%.

Course Schedule:

Monday and Wednesday 11:00 am to 11:50 am
Friday 10:00 am to 12:00 pm

SCANS Information:

The following SCANS skills will be taught and/or reinforced in this course:

**Foundation**

*Personal Qualities* responsibilities; self-esteem; sociability; self-management; integrity/honesty

**Workplace Competencies**

*Technology* selects technology; applies technology to task; maintains and troubleshoots equipment

SAFETY

Students receive annual training in the following: blood and air borne pathogens,
TRAINING

electrical safety, back safety, hazardous chemicals, latex allergies, fire and disaster procedures, security and personal safety procedures and safety requirements of clinical facilities. Students must maintain CPR, immunizations and health insurance during all clinical courses.

Instructor Information:

Name: William Heathman
Office Location: 211 HS
Office Telephone: 685-4691 - Home 699-0408
E-Mail Address: wheathman@midland.edu
Office Hours: 8 to 9 M,W, F
Division Chairman and Division Secretary Names: Becky Hammack and Kay Floyd
Division Office Location and Telephone: 209 A, Davidson Family Health Science Building 915/685-4600

Students are encouraged to contact the instructor at any time; however, making an appointment will guarantee the instructor’s availability at a specific time.

Revised and handed out, 8/27/08