SALT LAKE COMMUNITY COLLEGE
Radiologic Technology Program

Course Syllabus (subject to change)

Course and Credit Hours: RADS 1050 (2 credits)

Name of Course: Patient Care

Semester and Term:

Class Location and Time:

Instructor and Phone:

Office Location:

Mailbox Location:

Email Address:

Consultation Hours:

Textbook: Radiologic Imaging Sciences and Patient Care, 8th Edition By Adler and Carlton

Link or Instructions for Accessing Online Course Materials: Material can be found in canvas.

Library Link: For a list of resources that support the program go to: http://libguides.slcc.edu/content.php?pid=16754

Prerequisite: Admission to the Radiology Program.

Course Description: Covers the role of a radiographer as patient care provider. Standard precautions, immobilization, lifting, emergencies, vital signs, oxygen & suction, asepsis & infection control, history taking, communication and patient education.

SLCC Student Learning Outcomes:
SLCC is committed to fostering and assessing the following student learning outcomes in it programs and courses:

1. Acquire substantive knowledge
2. Communicate effectively
3. Develop quantitative literacies
4. Think critically & creatively

5. Become a community engaged learner
6. Work in professional & constructive manner
7. Develop computer & information literacy
8. Develop lifelong wellness

Student Learning Outcomes:
The students will learn many facets of caring for their patients in the radiology departments ranging from promoting effective communication to recognizing and treating life threatening situations.

1. INTRODUCTION TO IMAGING AND RADIOLOGIC SCIENCES

Reading assignment: **Chapter 1** in "Radiologic Sciences and Patient Care"

Upon completion of this material the student will be able to:

- Define terms related to radiologic technology.
- Explain some career opportunities within the profession of radiologic technology.
- Identify the various specialties within a radiology department.
- Describe the typical responsibilities of the members of the radiology team.
- Discuss the roles of other members of the health care team.

2. RADIOLOGY ADMINISTRATION

Reading assignment: **Chapter 6** in "Radiologic Sciences and Patient Care"

Upon completion of this material the student will be able to:

- Provide an overview of the administration of a hospital radiology department and the structure of hospital organization.
- Describe how the radiology department fits into and complements the hospital environment.
- Describe regulating agencies that affect radiology.

3. BASIC RADIATION PROTECTION AND RADIOBIOLOGY

Reading assignment: **Chapter 9** in "Radiologic Sciences and Patient Care"
Power Point: Basic Radiation Protection

Upon completion of this material the student will be able to:

- Describe the nature of ionizing radiation.
- Discuss the various methods used to protect the patient from excessive exposure.
- Discuss the various methods used to protect an occupational worker from excessive radiation.
- Describe devices used to measure exposure to ionizing radiation.

4. HUMAN DIVERSITY

Reading assignment: **Chapter 10** in "Radiologic Sciences and Patient Care"

Upon completion of this material the student will be able to:

- Define human diversity.
- List some of the human diversity characteristics.
- Describe the human diversity traits of age, ethnicity or national origin, race, gender, or sexual orientation, and mental and physical ability.
- List the elements associated with cultural competency.
- Know the empathetic practices that help foster cultural insight and produce improved outcomes.
- Describe six areas of human diversity that health care providers need to understand to provide high quality and effective care.
- Discuss ways in which professional medical imaging organizations have expressed valuing human diversity.

5. PATIENT INTERACTIONS

Reading assignment: **Chapter 11** in "Radiologic Sciences and Patient Care"

Upon completion of this material the student will be able to:

- Identify qualities needed to be a caring radiologic technologist.
- Discuss the general needs that patients have according to Maslow's hierarchy of needs.
- Relate differences between the needs of inpatients and those of outpatients.
- Explain appropriate interaction techniques for various types of patients.
- Discuss appropriate methods of responding to terminally ill patients.

6. HISTORY TAKING

Reading assignment: **Chapter 12** in "Radiologic Sciences and Patient Care"

Objectives: Upon completion of this material the student will be able to:

- Describe the role of the radiologic technologist in taking patient clinical histories.
- Describe the desirable qualities of a good patient interviewer.
- Differentiate objective and subjective data.
- Explain the value of each of the six categories of questions useful in obtaining patient histories.
- Describe the importance of clarifying the chief complaint.
- Detail the important elements of each of the Sacred Seven elements of the clinical history.

7. SAFE PATIENT MOVEMENT AND HANDLING TECHNIQUES

Reading assignment: **Chapter 13** in "Radiologic Sciences and Patient Care"

Objectives: Upon completion of this material the student will be able to:

- Define the following terms associated with body mechanics:
  - base of support
  - center of gravity
- Explain the difference between mobility muscles and stability muscles.
- List principles of safe transfers.
- Describe the cause, signs, symptoms and treatment of orthostatic hypotension.
- Explain how to assess a patient before a lift or transfer.
- Describe and perform four types of wheelchair transfers to include:
  - standby assist
  - assisted standing pivot transfer
  - two-person lift
  - hydraulic lift technique
- Describe and perform a standard cart transfer.

8. IMMOBILIZATION TECHNIQUES

Reading Assignment: **Chapter 14** in "Radiologic Sciences and Patient Care"

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

- Demonstrate a range of immobilization techniques.
- Explain the importance of quality communication with the patient.
- Describe how to reduce radiation exposure to the patient by using proper immobilization methods.
- Apply immobilization techniques in routine situations.
- Use immobilization devices effectively.
- Describe trauma immobilization techniques as they pertain to specific anatomical sites.
- Explain the importance of establishing rapport with pediatric patients.
- Use various methods of pediatric immobilization.
- Describe appropriate application of immobilization techniques pertinent to geriatric patients.

9. VITAL SIGNS, OXYGEN, CHEST TUBES, AND LINES

Reading Assignment: **Chapter 15 pgs. 196-209, Chapter 16 pgs. 220-224** in "Radiologic Sciences and Patient Care"

At the end of this unit the student will be able to:

- Explain what is meant by vital signs.
- Know how to take a temperature, normal ranges and significance of abnormal temperatures.
- Know how to take a pulse, normal ranges and significance of abnormal pulses.

- Know how to take a respiration measurement, normal ranges and significance of abnormal respiration rates.
- Know how to take a blood pressure by using the pulse obliteration method.
- Explain the normal ranges and significance of abnormal blood pressure measurements.
- Discuss the indications for administering oxygen therapy.
- Identify details and components of oxygen delivery systems to include:
    - nasal cannula
    - simple mask
    - non-rebreathing mask
    - air entrainment system
    - tent and oxyhood
    - ventilator
    - oxygen cylinder
    - radiographic room set-up

10. INFECTION CONTROL AND ASEPTIC TECHNIQUE

Reading Assignment: **Chapter 17 & 18** in "Radiologic Sciences and Patient Care"

At the end of this unit the student will be able to:

- Define terminology related to infection control.
- Identify four infectious microbes.
- Explain the steps involved in establishing an infectious disease.
- Discuss the chain of infection.
- Explain how to prevent the transmission of a disease.
- List the various sources of a nosocomial infection.
- Discuss how microbes are controlled by the host.
- Describe the difference between medical and surgical asepsis.
- Explain chemical and physical methods of asepsis to include:
    - disinfectants
    - antiseptics
    - bacteriostatic agents
    - bacteriocidal agents
    - autoclaving
    - gas sterilization
- Describe the basics of using Standard Precautions.
- Recall details of transmission-based precautions to include:
    - airborne precautions
    - droplet precautions
    - contact precautions
- Describe the contact precaution technique used when performing a mobile exam.
- List the basic principles of sterile technique.
- Describe how to establish a sterile field.
- List the steps of a proper surgical scrub.
- Provide care to patients undergoing sterile procedures.

11. MEDICAL EMERGENCIES

Reading Assignment: **Chapter 20** in "Radiologic Sciences and Patient Care"

Upon completion of this unit the student will:

- Describe how to verify the correctness of the examination.
- Explain the procedure for patient assessment regarding the following areas:
    - mental status
    - respiration
    - skin color
    - presence of open wounds or bleeding
    - musculoskeletal integrity
    - patient mobility
    - evaluation of the degree of sensation/presence of pain
- Define what an emergency is.
- Know definitions, causes, symptoms and treatment for each of the following:
    - trauma
    - hypovolemic shock
    - head injuries
    - septic shock
    - diabetes
    - neurogenic shock
    - respiratory arrest
    - cardiogenic shock
    - cardiac arrest
    - anaphylactic shock
    - stroke (CVA)
    - metabolic shock
    - nausea and vomiting
    - psychogenic shock
    - epistaxis
    - vertigo and syncope
    - epilepsy and seizures
    - open wounds
    - burns
    - dehiscence
    - cyanosis
    - aspiration
    - fractured extremities
    - c-spine injuries

Know what each of the following tubes or lines are used for, proper location and how to care for:

Reading Assignment - Ch. 15 Chest Tubes & Lines: pgs. 210-218

Ch. 18 Aseptic Techniques, Tracheostomies, Chest Tubes, Urinary Catheters, Intravenous & Intra-arterial Lines & Pacemakers: pgs. 220-225
Ch. 19 Nonaseptic Techniques, Nasogastric Tubes & Colostomies: pg.'s: 262-264, 271-272

  - endotracheal tubes
  - chest (thoracostomy) tube
  - central venous lines
  - pulmonary arterial lines
  - pacemaker
  - nasogastric tubes
  - urinary catheters
  - colostomy
  - tracheostomy
  - mechanical ventilator
- Know special considerations for bedside radiography, what to watch for and how to care for patients in this situation.

Course Requirements:

Tests and Quizzes. As per the Student Handbook, **tests and quizzes must be taken on the day assigned at the designated time. In the event the student will miss a test or quiz, they must call or e-mail the instructor** PRIOR **to the designated test start time. Phone messages are acceptable.** IF THE STUDENT DOES NOT CALL OR E-MAIL PRIOR TO THE TEST OR QUIZ START TIME, the student must take the test or quiz with an automatic 50% deduction.
All tests and quizzes are to be made up by or on the 1st class day the student returns. It is the student's responsibility to initiate making up tests and quizzes. If they fail to do so, they forfeit the opportunity to take the test or quiz.

Attendance. As per the Student Handbook, **attendance in class is** extremely **important. You are <u>forming work habits</u> and a <u>reputation</u> that will follow you into the professional environment. You are expected to be present for all courses and participate in planned activities. It is the responsibility of the student to obtain notes, handouts or assignments given on any missed day.** ***<u>Students who have</u>*** *<u>absences in excess of 20%</u>* ***<u>of total attendance time in each course will be</u>*** *<u>terminated from the program</u>*

Student Responsibilities. Students are expected to complete reading assignments prior to scheduled class/lab times. Students should have completed worksheets, etc. and be prepared to discuss the material knowledgeably. If the student is having difficult in the course, it is the student's responsibility to make arrangements to take with the Instructor. Students are expected to be self-directed and motivated in identifying their learning needs associated with the course content.
Assignments.

1. Each student will be required to pass off a list of transfer lifts at their respective clinical site by the clinical instructor (CI) or a designated technologist approved by the CI.
2. Students are to choose a cultural group, different than your own, and research that particular cultural group and report on the cultural attitudes, beliefs, practices, traits, preferences and behaviors *as related to illness and health care*. The assignment is to write a 1-page paper (12-point font, double spaced, and cite where you got your information) and create a PowerPoint of images from that culture.
3. Read an ASRT article "Preventing Drug-Resistant Infections in Health Care" and be prepared to discuss it in class

Each assignment has a specific due date as noted on the course schedule. No late assignments will be accepted.

Incomplete. Students must complete all requirements and receive a C grade or higher in each course to remain in the program.

Class Procedure or Format:
This course will utilize lecture and discussion, Power Point presentations, Group presentations and lab demonstrations. Additional information will be placed on Canvas

Course Evaluation
Quiz's:

Student Manual	2%
Transfer Techniques	2%

Assignments:

#1: Transfer Techniques	4%
#2: Cultural Diversity	4%
#3: ASRT Article	4%

Tests:

First Test	16%
Second Test	16%
Third Test	16%
Fourth Test	16%
Comprehensive Final	20%

Grading:

95-100	**A**	75-77	**C**
90-94	**A-**	71-74	**C-**
87-89	**B+**	67-70	**D+**
83-86	**B**	64-66	**D**
80-82	**B-**	Below 64	**E**
78-79	**C+**		

Wireless Devices in the Classroom:
The advent of technology use in the classroom as an instructional tool has caused both opportunities and distractions. Wireless devices cause individual inattentiveness and can make it difficult for others to stay focused. The following policies are in effect during class:

1. Cell phones, iPods/Pads, pagers, High-Resolution DVR Spy pens with webcam, microphones, recorders or any other wireless devices (excluding ADA authorized devices) that may distract from the class are to be silenced and/or set to vibrate mode before entering the classroom and may not be on the desk during class. This allows students to receive SLCC emergency notifications through email or text messaging alerts.
2. Wireless devices can be checked during class breaks outside the classroom.
3. You are expected to engage in discussion for the class. If you are discovered engaging in reading/texting messages, surfing the web and engaging in other computer activities not directly related to class, you will be asked to leave the class and will be counted as absent for that class session.
4. You may not record or publish information from the class without written authorization from the instructor. If used without written authorization, you will have violated "Privacy/Intellectual Property Rights".

Student Handbook:
Students must adhere to all policies and procedures of the Radiologic Technology Program as documented in the Student Handbook. It is the student's responsibility to be aware of, and follow, all requirements as listed in the Handbook.

Emergency Evacuation Procedures
In case of an emergency, elevators should not be used as emergency exits. All class members should exit through the nearest doors on the west side of the building, then proceed toward the round-about on the northeast side of the building. We will then verify that all students are accounted for and unharmed. Please inform your instructor if you require assistance or accommodation during an evacuation. The instructor will identify several students in the class that are willing to provide assistance. If you have a disability, please notify your instructor and fill out an Evacuation Information Form

The SLCC Department of Public Safety is using an app called the Crisis Manager to inform students and staff about Emergency Procedures. The app allows SLCC to instantly update these procedures. To download this app go to the App Store or Google Play Store, type **SchoolDude CrisisManager** in the search box and click "Get" or "Install. For questions regarding the Emergency Procedures or downloading [redacted]

SLCC Institutional Resources:
For information on SLCC Institutional Resources, please refer to the link on Canvas under Institutional Syllabus

ACADEMIC GRIEVANCE POLICY

In accordance with the Salt Lake Community College Student Code of Conduct, http://www.slcc.edu/policies/docs/Student_Code_of_Conduct.pdf, the grievance policy for students with reference to academics can be found in Section III. Students are encouraged to seek resolution with the instructor(s) whenever possible.

It is the goal of the School of Health Sciences to be forthright and consistent with specific academic policies throughout divisions and programs. This policy singularly addresses academic issues and the general principles for disciplinary actions as noted in the Student Code of Conduct Section III. It should be noted it is up to the faculty's discretion to provide warning (verbal or written), suspension, or dismissal based upon program policy and severity of the issue at hand. It is realized in some health sciences programs a failing grade, as stated in the syllabus and/or policy manual, may result in program dismissal.

STEP ONE: A student has the right, as per college policy, to grieve a grade, warning (verbal or written), suspension, or dismissal received within a program of study. A student, as per policy, must make an appointment to meet with the instructor of the class. A meeting, for anything other than a final grade, should be made within ten (10) days of the incident. Final grade disputes require a meeting within 30 days of the student receiving the grade. Every effort should be made to find resolution and provide evidence from both parties with respect to the grade issued.

STEP TWO: If a resolution cannot be made, the student must request in writing five (5) business days from the date of meeting with the faculty, a committee review of the grievance to the Associate Dean of the specific division. The grievance will be reviewed by a committee consisting of three (3) to five (5) faculty outside the program in which the student is enrolled. This will include the following members, the Associate Dean and two to four faculty members outside the discipline. The Associate Dean will serve as committee chair. One faculty and the program coordinator of the program involved in the grievance can attend the procedure, as can the student with one representative. Each of these parties will only be allowed to present evidence to the committee and not vote on the issue in question. Legal representation is allowed by either party. The proceedings will be recorded for accuracy. Upon completion of the proceedings, the committee ONLY will vote on the issue(s) noted in the student's grievance. A formal letter will be provided by the committee chair within ten (10) business days of the end of the proceeding with the committee's decision regarding the issue.

STEP THREE: If the student is not satisfied with the outcome, they may appeal to the Academic Dean of the School of Health Sciences. This must be done in writing within five days of receiving the formal letter from the grievance committee chair. The Dean will review the appeal, all evidence, and render a decision to the student within ten (10) days of receiving the formal letter from the student. The decision of the Dean of the School of Health Sciences is final and cannot be appealed.

The Disability Resource Center
SLCC values inclusive learning environments and strives to make all aspects of the College accessible to our students. If you have a disability and believe you need accommodations to improve access to learning materials or the learning environment, please contact the Disability Resource Center:

Although pregnancy is not a disability, our DRC advisors are trained to assist with pregnancy related accommodations in addition to disability related accommodations. We strongly recommend any student who is pregnant or becomes pregnant while in the program notify the DRC. This will allow preventative measures to be taken, safety process in place to protect the student and the unborn child and allow for accommodations.

Due to risk of fetal exposure to radiation and chemicals while in the program it is strongly recommended that all pregnant students work closely with the DRC.

Watch the following video to learn more about the DRC: DRC Accessibility