



RAD-520: PATIENT CARE & MEDICAL ETHICS FOR RADIOGRAPHERS

Effective Term

Fall 2024

BOT Approval Date

12/14/2023

Discipline

RAD - Radiologic Technology

Course Number

520

Course Title

Patient Care & Medical Ethics for Radiographers

Short Title

Patient Care & Medical Ethics

Credit Status (CB 04)

D - Credit - Degree applicable

Units

Lecture Units

3.00

Total Units

3

Hours

Lecture Contact Hours

48-54

Out of Class Hours Lecture

96-108

Total Contact Hours

48 - 54

Total Out of Class Hours

96 - 108

Total Student Learning Hours

144 - 162

Distance Education

No

Catalog Description

This course is a lecture/demonstration class to teach vital signs, medical emergencies, imaging procedures, aseptic techniques, drug administration, communication, body mechanics, infection control, and medical ethics used by radiology personnel in working with patients from diverse backgrounds. Students will be required to obtain or show proof of having a current cardiopulmonary resuscitation (CPR) certification from the American Heart Association by the end of the course.

**Attach Supporting Documents**

ASRT 2022 radiography curriculum guide.pdf
JRCERT 2021 Radiography Standards pg 28.pdf

Attach Supporting Documents

LMI.pdf

Requisites**Prerequisite(s)****Prerequisite(s) (must be taken before)**

Acceptance to the Radiologic Technology Program.

Other Enrollment Criteria**Other Enrollment Criteria**

Cardiopulmonary resuscitation (CPR) certification from the American Heart Association.

Codes**TOP Code (CB 03)**

1225.00* - *Radiologic Technology

CIP Code

51.0911 - Radiologic Technology/Science - Radiographer.

Student Accountability Model (SAM) Priority Code (CB 09)

C - Clearly Occupational

Noncredit Category (CB 22)

Y - Credit Course

Repeatability Code

No

Grading Option

Letter grade OR P/NP

Minimum Qualifications**Minimum Qualifications**

Radiological Technology

And/Or

End

CSU Area(s)**IGETC Area(s)****Learning Objectives****Learning Objectives****Learning Objective**

1. Assess the various methods of communication and how to communicate effectively with all members of the health care team and a diverse population of patients.
2. Analyze the emergency medical code system for the institution and the role of the imaging professional during a medical emergency.
3. Demonstrate proper infection control to include handwashing techniques, medical and surgical asepsis, and isolation techniques.
4. Prepare a sterile tray, prepare the skin, and drape for a special procedure including administration of contrast media.

5. Demonstrate the correct manner of moving, transferring, and positioning patients from a wheelchair, bed, or gurney to the imaging table to prevent personal and patient injury.
6. Demonstrate the skills necessary for CPR and the Heimlich maneuver for choking by obtaining certification from the American Heart Association.
7. Evaluate the Code of Ethics of the American Registry of Radiologic Technologists along with the patient's Bill of Rights..
8. Assess the medicolegal use of radiographs and the radiology report.
9. Analyze legal terms related to intentional and non-intentional torts along with hospital liability and malpractice policies.
10. Differentiate radiologic procedures that require informed consent.
11. Analyze ethical dilemmas in healthcare while considering the impact of various factors, including different gender identities, race, culture, and disabilities, on patient care and healthcare decision-making. Compare ethical dilemmas and how patient care is affected.

Learning Outcome Information

Course Learning Outcomes

Learning Outcome
1. Students will describe the emergency medical code system for the institution and the role of the imaging professional during a medical emergency.
2. Students will understand the Code of Ethics of the American Registry of Radiologic Technologists.
3. Students will engage in inclusive, respectful conversations with a diverse population of patients.

Program Learning Outcomes

Learning Outcome
Apply positioning skills in all required radiographic examinations.
Select appropriate technical factors for radiographic examinations.
Practice radiation protection for all radiographic examinations.
Employ proper patient care techniques and effectively provide care for patients from diverse groups/populations.
Demonstrate oral and written communication skills.
Relate to and anticipate the needs of the doctors and technologists.
Adjust to changes, situations, patient conditions, updated evidence-based practice, and deviation from the normal routine.
Demonstrate knowledge of ethical requirements for an entry level radiographer along with ethical practices in a healthcare setting.
Understand professional obligations upon gaining the ARRT status.

Institutional Learning Outcomes

Aesthetic Awareness: The student will identify and evaluate how aesthetic expression leads to an appreciation of social and cultural context as well as the values of art and nature.

Communication: The student will effectively express and exchange ideas through listening, speaking, reading, writing, visual works, and other modes of interpersonal expression.

Critical Thinking: The student will analyze problems, gather and synthesize relevant information, evaluate ideas, information, and evaluate alternative points of view to create, innovate and implement effective solutions.

Cultural Awareness and Humility: The student will demonstrate knowledge of and sensitivity toward individuals of diverse ethnicity, age, gender, sexual orientation, and religious affiliations, as well as toward those individuals with diverse abilities and socio-economic classes to respectfully interact with individuals of diverse perspectives, beliefs and values while being mindful of the limitation of their own cultural frameworks.

Information and Technology Literacy: The student will access, interpret, evaluate, and apply relevant information sources and digital media effectively, and in an ethical and legal manner.

Scientific Awareness: The student will apply the scientific method of inquiry to assess potential solutions for real-life challenges by employing science-based knowledge and methodologies in daily life.

Social Awareness: The student will recognize and analyze the interconnectedness of global, national, and local concerns, analyzing cultural, political, social, and environmental issues from multiple perspectives and appreciate similarities and differences among cultures.

Civic
Personal
and Professional Responsibility

Content

Course Lecture Content

1. Medical Asepsis
 - a. Infection control
 - b. Direct/indirect contact
 - c. Body defenses against disease
 - d. Isolation techniques
 - e. Hand washing technique
 - f. Linen handling
2. Surgical Asepsis
 - a. Sterilization methods
 - b. Sterile fields
 - c. Surgical asepsis
 - d. Sterile tray preparation
 - e. Skin prep
 - f. Draping
 - g. Gowning/gloving technique
 - h. Dressing wounds
 - i. Surgical scrub technique
 - j. Personal/general hygiene
 - k. Care and maintenance of equipment
 - l. Operating room protocol
3. Emergency Procedures
 - a. Medical emergencies
 - b. Vital signs
 - c. Laboratory data
 - d. Patient chart
 - e. Cardiopulmonary resuscitation
4. Emergency Trauma
 - a. Shock
 - b. Medical emergencies
 - c. Burns
 - d. Drug administration
 - e. Basic categories of drugs
 - f. Oxygen administration
 - g. Catheters and drains
 - h. Gastric tubes and suctions
 - i. Chest tubes and tracheostomies
5. Pharmacology for the radiographer
6. Professionalism in Imaging
 - a. Legal aspects
 - b. Grieving process
 - c. Ethics
 - d. Communication
 - e. Health care team
 - f. Dying and death
7. Mechanics and Safety
 - a. Body mechanics
 - b. Environmental safety
 - c. Patient transfer and movement
8. Health Professions
 - a. Interprofessional Practice & Education
 - b. Health Care Environment
 - c. Health Provider & Radiology Organization

- d. Accreditation
- e. Professional Development
- 9. Patient Communication
 - a. Gender
 - b. Culture
 - c. Race
 - d. Disabilities
- 10. Ethics and Ethical Behavior
 - a. Ethical Dilemmas
 - i. Informed consent and language barriers
 - ii. Access to care for different race, culture, and disabilities
 - iii. Cultural competence vs. medical standardization
 - iv. Religious beliefs and end of life directives
 - v. Gender identity and healthcare
 - vi. Allocation of scarce resources
 - b. Legal Issues
 - i. Malpractice
 - ii. Informed consent
 - iii. Patient privacy
 - iv. Radiation safety
 - c. Legal Doctrines and Standards
 - i. State and federal regulations
 - ii. Quality assurance and accreditation
 - iii. Reporting and documentation
 - iv. Health Insurance portability and accountability act (HIPAA)
 - d. Patient Consent
 - i. Language and communication
 - ii. Withdrawal of consent
 - iii. Emergency situations
 - iv. Alternative options for patients of diverse race and culture
 - v. Minors and guardians
 - vi. Contrast agents
 - e. Patient Bill of Rights
 - i. Dignity and respect
 - ii. Quality of care
 - iii. Communication with patients of different race, culture, and gender

Methods of Instruction

Method

Lecture

Integration

Lectures, PowerPoint presentations, and videos, will be employed to comprehensively cover topics such as patient care techniques, medical ethics, patient safety, infection control, aseptic technique, handling medical emergencies, and fostering cultural, racial, and ethnic diversity awareness within a patient care setting. Additionally, the scope of practice for radiographers will be a central focus of our educational materials.

Method

Observation and Demonstration

Integration

Small group demonstrations will be presented by the instructor on how to properly manage sterile equipment such as, gowns and gloves. Proper application of surgical masks will be included along with the proper drawing of liquid medications into a syringe using aseptic technique. Proper body mechanics of moving patients from a wheelchair and gurney and preparing a sterile tray will also be demonstrated.

Method

Discussion

Integration

In class discussions and/or discussion groups are used to stimulate critical evaluations on medical legal issues that pertain to imaging patients and the patient's right to quality healthcare. Additional topics include how to effectively communicate with patients with gender identity issues along with different ethnicity, race, and cultures. Critical thinking skills can be developed by discussion of how to manage patients with disabilities when imaging.

Method

Reading

Integration

Out of class reading assignments will enhance understanding of policies and procedures when managing patients in a hospital environment. Reading assignments will include the required textbook material along with supplemental readings on how to effectively communicate with patients in a respectful and empathetic manner to achieve imaging goals. Medical ethic case studies will be reviewed and analyzed for clarification and available options when imaging patients. The reading assignments will prepare the student for the classroom discussions to help develop the critical thinking skills necessary for a radiographer to provide quality patient care and proper medical ethics.

Method

Film/video Viewing and Discussion

Integration

Videos will be utilized to immerse students in the radiology and surgical environments, enabling them to gain a practical understanding of the concepts they learn in theory. These videos will serve as powerful tools to visually engage students and facilitate in-depth analysis and discussion of radiology and hospital policies and procedures. Video resources will include the Lillian Torres Patient Care in Imaging Technology series and carefully curated YouTube content, which will complement and enrich our lecture material.

Method

Homework

Integration

Out of class assignments will integrate information from the classroom with information from the textbooks and supplemental materials. Examples are analyzing medical ethical dilemmas to explore options, sequencing proper body mechanics when lifting patients to avoid injury, and explaining hospital emergency codes so the patient can be protected.

Methods of Evaluation**Method**

Exams/Tests

Integration

Examinations and tests will serve as evaluation tools to gauge students' comprehension of proper patient care skills and their capacity to engage in critical thinking while performing imaging procedures in a hospital setting. Furthermore, these assessments will evaluate students' ability to discern the legal aspects associated with working in a medical facility and their interactions within the healthcare team. The examinations will consist of multiple-choice questions to effectively prepare students for the American Registry of Radiologic Technologists exam, which also employs a multiple-choice format. Grading will be based on the accuracy of responses.

Method

Class Performance

Integration

Student psychomotor skills will be assessed using a skills checklist provided by the instructor. The instructor will closely observe and evaluate students' proficiency in tasks such as gowning, gloving, masking, syringe preparation, proper body mechanics, and sterile tray preparation. These assessments will be graded based on both accuracy and relevance.

Method

Class Participation

Integration

Assessment of students' grasp of patient care and medical ethics concepts, including the ability to identify medical emergencies, safely transfer patients, maintain infection control, and provide patient-centered care, will primarily hinge on their active participation and their willingness to engage in collaborative group discussions. Assessment is contingent upon student participation.

Method

Other

Integration

Students must acquire cardiopulmonary resuscitation (CPR) certification from the American Heart Association if they do not already possess a current certification. All affiliated hospitals mandate this certification as a prerequisite for training. CPR training sessions, led by the instructor or a designated trainer, will be offered outside of regular class hours for those in need of certification. Alternatively, students may choose to receive training from other approved sources as long as it aligns with the American Heart Association's requirements. This training will be assessed on a pass/fail basis. To earn a passing grade for the course, students must demonstrate a valid and up-to-date CPR credential.

Method

Papers

Integration

Written assignments will provide students with the opportunity to critically examine contemporary medical ethics topics related to patient care, focusing on issues related to gender, culture, race, or disability. The goal is to identify strategies for achieving more positive and effective outcomes and to explore their practical application in a hospital setting. Papers will be assessed based on the inclusion of pertinent sources, the proper integration of source material, the accurate presentation of others' viewpoints, and the feasibility and impact of the proposed solutions.

Assignments**Assignment Type**

Writing

In-class and/or outside of class

In-class

Outside of class

Formative or Summative

Formative

Assignment

Watch the video presentation by Lillian Torres titled "Measuring Blood Pressure and Vital Signs" provided by the instructor. The aim of this assignment is to deepen your understanding of blood pressure and vital signs, particularly focusing on the standard and atypical values, potential pathological implications of abnormal readings, factors responsible for measurement inaccuracies, and the consequences of relying on unreliable readings.

Step 1: Watch the Video

Start by viewing the video presented by Lillian Torres. Pay close attention to the techniques and procedures demonstrated for measuring blood pressure and vital signs.

Step 2: Document Standard and Atypical Values

After watching the video, compile a list of standard values for blood pressure and vital signs. Additionally, identify and document any atypical values mentioned in the presentation.

Step 3: Explore Pathological Implications

Examine the potential pathological implications associated with abnormal readings for blood pressure and vital signs. Consider how these abnormal readings might indicate underlying health conditions.

Step 4: Identify Factors Responsible for Inaccurate Measurements

Pinpoint the primary factors discussed in the video that can lead to inaccurate measurements of blood pressure and vital signs. Understand the importance of proper technique and conditions for accurate readings.

Step 5: Elaborate on Consequences of Unreliable Readings

Elucidate the potential consequences of relying on unreliable readings for clinical decision-making. Discuss the impact on patient care and treatment plans when inaccurate measurements are used.

Step 6: Submit Your Findings

Compile your findings into a well-structured paper. Ensure that your paper is clear, concise, and adheres to proper grammar and citation guidelines. Your evaluation will be based on the precision of information presented and the quality of your writing.

Submission Guidelines:

Submit your assignment as a neatly typed document, following the formatting and citation style guidelines provided by your instructor.

This assignment is designed to enhance your knowledge of measuring blood pressure and vital signs, as well as the importance of accurate readings in healthcare settings. Feel free to reach out if you have any questions or need clarification.

Assignment Type

Reading

In-class and/or outside of class

Outside of class

Formative or Summative

Formative

Assignment

Before our upcoming class, it is essential that you read the assigned chapters in the required textbook. These readings will provide you with foundational knowledge in patient care and medical ethics, which will be the focus of our upcoming sessions. Please prepare to actively participate in classroom discussions about the following key topics:

1. Aseptic Techniques

Understand the principles and practices of aseptic techniques in healthcare settings.

Be ready to discuss the significance of infection control and prevention.

2. Proper Lifting and Moving Skills

Familiarize yourself with safe lifting and moving procedures to protect both patients and healthcare providers. Be prepared to share your insights on the importance of ergonomic practices in healthcare.

3. Vital Signs Assessment

Learn how to measure and interpret vital signs such as heart rate, blood pressure, respiratory rate, and temperature. Be ready to engage in discussions about the significance of vital signs in patient assessment and monitoring.

4. Medical and Legal Considerations Concerning Patient Care

Explore the legal and ethical aspects of patient care, including patient rights, consent, and confidentiality. Be prepared to discuss real-world scenarios and dilemmas related to medical ethics in healthcare practice.

Required Readings:

Please read the following chapters in the textbook, :

Chapter 1: Aseptic Techniques and Infection Control

Chapter 2: Safe Lifting and Moving Techniques

Chapter 3: Vital Signs Assessment

Chapter 4: Medical and Legal Considerations in Healthcare

Additional Notes:

Take notes on key concepts, important definitions, and any questions or insights that arise during your reading.

Feel free to consult additional sources or research related topics to enhance your understanding.

Active participation in class discussions is encouraged, so come prepared to share your thoughts and engage in meaningful dialogue.

By completing this reading assignment, you will be well-prepared to contribute to the classroom discussions and develop a solid foundation in patient care and medical ethics.

Assignment Type

Writing

In-class and/or outside of class

In-class

Outside of class

Formative or Summative

Summative

Assignment

Explore contemporary medical ethics topics related to patient diversity, including gender, race, culture, and disabilities. Conduct research to understand these complex issues and propose solutions for more inclusive and ethical healthcare practices.

Instructions:

Topic Assignment: Your instructor will assign you a specific contemporary medical ethics topic related to patient diversity (gender, race, culture, or disabilities). Ensure you understand the assigned topic's relevance to medical ethics.

Research and Source Selection: Conduct thorough online research to find at least three reputable sources that address your assigned topic. Use academic databases, medical journals, and credible news outlets for your research.

Paper Outline: Create a clear outline for your paper, including the following sections:

a. **Introduction:** Introduce the chosen contemporary medical ethics topic and its significance in healthcare.

b. **Literature Review:** Summarize and critically analyze information from your selected sources, discussing key arguments, ethical dilemmas, and current practices.

c. **Proposed Solution:** Develop a comprehensive plan to promote more inclusive and ethical healthcare practices, addressing the concerns raised in your research.

- d. Application to Healthcare Setting: Describe how your proposed solution can be applied in a real-world healthcare setting, considering challenges and benefits.
- e. Conclusion: Summarize the key points and emphasize the importance of addressing patient diversity in healthcare.

Paper Writing: Write a well-structured paper following your outline. Focus on grammar, organization, clarity, and coherence. Use proper citations and references in a recognized citation style (e.g., APA, MLA).

Verbal Summary and Discussion: Be prepared to verbally summarize your paper's content in class. Highlight key findings and proposed solutions. Engage in an in-class discussion to exchange ideas and viewpoints on the various topics.

Grading Criteria:

Your paper will be assessed based on the following criteria:

Content and Relevance: Depth of research, accuracy of information, and relevance to patient diversity.

Structure and Organization: Clarity and coherence of the paper's structure and flow.

Grammar and Language: Correct use of grammar, spelling, and language.

Proposed Solution: The comprehensiveness and feasibility of the proposed solution.

Application to Healthcare Setting: Ability to apply the proposed solution to a real-world healthcare environment.

This assignment encourages you to examine critical medical ethics issues related to patient diversity and propose practical solutions for more inclusive and ethical healthcare. It provides an opportunity to enhance research, writing, and presentation skills while engaging in meaningful discussions with peers.

Course Materials

Textbooks

Ryan, T., (2023) Torres' Patient Care in Imaging Technology , 10th Ed., Wolters Kluwer. ISBN#: 978-1975192518

Other Resources

Ehrlich, R. and Coakes, D., (2021) Patient Care in Radiography, 10th Ed., Mosby. ISBN#: 9780323654401

Open Educational Resources

NHS Infection Control, Aseptic Technique

<https://www.infectionpreventioncontrol.co.uk/content/uploads/2019/06/CH-03-Aseptic-technique-April-2023-Version-3.00.pdf>

Class Size Information

Class Size

40

Class Size Category

A - Lecture/discussion 40

Diversity and Inclusion

Explain how diversity and inclusion(e.g., gender, culture/race, sexuality, etc.) is infused into the course.

This course incorporates a range of content encompassing diverse patient scenarios that highlight instances where gender, culture, race, and disabilities influence patient care. As an integral part of the class curriculum, students will engage in discussions and analyses of how to interact with a diverse spectrum of patients, with the aim of ensuring a positive and empathetic experience throughout the imaging procedure. Additionally, students will participate in classroom discussions and complete a paper focused on a medical ethics dilemma linked to issues related to gender, culture, race, or disability. The objective is to identify strategies for achieving more positive and effective outcomes and to explore their practical application within a hospital environment.

Describe how assignments, instruction, evaluation, course content, and interactions are contextualized for diverse learners promoting an equitable course.

The course resources are offered in multiple forms to offer diverse learning methods to students. Audio learners can utilize in class instructor lectures; Visual learners can utilize power-point presentations from the instructor, required textbook readings, demonstrations presented by the instructor on vital signs, and videos on patient care skills such as blood pressure techniques; Hands-on learners will participate in the class room to the instructor the skills attained that include proper gloving and masking, sterile tray preparation, and body mechanics when transferring patients from a wheelchair or gurney to the x-ray table.

Interactions**Explain how the course will incorporate student-to-student interaction.**

Throughout the course, students will engage in classroom discussions covering a wide range of topics related to medical-legal issues. As part of this process, students will present summaries of their researched topics in class, fostering discussions on solutions and strategies for improving outcomes in these scenarios. Furthermore, students will collaborate in small groups to acquire hands-on skills, including the proper technique for donning sterile gloves and wearing surgical masks. They will also assist each other in the preparation of sterile trays and practice safe patient transfers from wheelchairs to the X-ray table.

Explain how the course will incorporate instructor-to-student interaction.

In this course, students have the opportunity to engage with the instructor through various demonstrations of patient care techniques. After observing these demonstrations, students then practice what they have learned on both fellow students and the instructor. These demonstrations encompass essential skills such as donning sterile gloves, wearing surgical masks, preparing sterile trays, and applying proper body mechanics.

The instructor actively participates in classroom discussions, providing insights and facilitating conversations on the research paper topic related to medical-legal issues. Instructors also engage in face-to-face lectures, where students can ask questions and seek clarification. Real-life experience stories are incorporated into these lectures to enhance student learning. The instructor encourages students to utilize office hours or arrange meetings after class if they require additional assistance or guidance.

Explain how the course will incorporate student-to-content interaction.

In this course, a comprehensive textbook is required that serves as an invaluable resource for future radiographers. Students are encouraged to engage with the course material by reading the textbook, watching instructional videos on vital sign skills, and actively participating in hands-on learning experiences, including the practical application of vital sign assessment on real individuals and the preparation of sterile trays for radiographic procedures. Course materials, including announcements, syllabi, supplementary materials, and the course schedule, are accessible through modules on the CMS (Course Management System).

Explain how the course will incorporate student-to-self interaction (metacognitive).

This course offers students the opportunity to explore the multifaceted aspects of patient care planning, with a focus on the pivotal role their professional ethics play in delivering equitable and culturally sensitive care to patients of diverse gender, race, culture, and abilities within a hospital environment. Additionally, it encourages students to engage in self-reflection and interaction to gain a comprehensive understanding of the complex issues related to healthcare disparities and the importance of inclusivity and accessibility in medical imaging procedures.

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