

RADIOGRAPHIC PROCEDURE 1 (RAD-242) 1437-1438H

| A- Course Information: | | | | | | |
|---------------------------------------|--------------------------|--------------|--------|---------------------------|-----------------|----------------|
| Course Code | Course Title | Credit Units | | | Study Lovel | Pro-requisites |
| course coue | | Total | Theory | Practical | Study Level | Freduisites |
| 242 | Padiographic procedure 1 | 2 | 2 | 1 | 4 th | ANAT 251 |
| 242 | | 5 | 2 | 1 | level/year2 | ANAT 251 |
| Course Coordinator/instructor | | Extension | | Email Address | | |
| | | | | | | |
| Dr. Moawia Bushra Mohammed Gameraddin | | m | | gameraddin@taibahu.edu.sa | | |

B- COURSE DESCRIPTION:

This course is designed to provide knowledge and skills necessary to perform general radiographic procedures. Topics include the basic radiographic positioning terminology with comprehensive study of theory and principles of radiographic positioning of the upper and lower extremities and related joints, shoulder girdle, pelvic girdle, chest, abdomen, skull, and vertebral column with emphasis on, indications, contra indications, patient care, image quality, and radiation protection.

C- COURSE OBJECTIVES:

- 1. Define the standard positioning terms related to general radiographic procedures
- 2. Discuss equipment and supplies necessary to complete general radiographic procedures
- 3. Explain the correct sequence of steps to perform general radiographic procedures
- 4. Identify common indications and contraindications related to the radiography of upper and lower extremities, shoulder girdle, pelvic girdle, chest, abdomen, skull, and vertebral column.
- 5. Explain the general considerations for radiographic procedures including the evaluation of requisition form, patient's needs, room preparation and patient communication.
- 6. Describe routine and special patient positioning of the upper and lower extremities, shoulder girdle, pelvic girdle, chest, abdomen, skull, and vertebral column
- 7. Locate anatomical surface landmarks used for the radiography of upper and lower extremities, shoulder girdle, pelvic girdle, chest, abdomen, skull, and vertebral column
- 8. Identify the importance of collimation, anatomic markers, and radiograph identification
- 9. Identify specific methods to reduce radiation exposure to the patient, peers, and self during radiographic procedures
- 10. Demonstrate proper use of equipment and supplies necessary to complete general radiographic procedures.
- 11. Simulate correct performing of the routine and special positions/projections of the upper and lower extremities, shoulder girdle, pelvic girdle, chest, abdomen, skull, and vertebral column
- 12. Apply radiographic procedures concerning projections required for specific regions of body.

D- THEORY TOPICS:

Kingdom of Saudi Arabia Taibah University – Madinah College of Applied Medical Sciences Department of Clinical Laboratory Sciences



| Week | Theory Topic | Hours |
|------|--|-------|
| 1 | Introduction to Radiographic Positioning | 2 |
| 2 | Radiographic Terminology | 2 |
| 3 | General Considerations of Radiographic Procedures | 4 |
| 4 | Chest Radiographic Positions and Projections | 2 |
| 5 | Bony thorax Radiographic Positions and Projections | 2 |
| 6 | Abdomen Radiographic Positions and Projections | 2 |
| 7 | Upper extremities Radiographic Positions and Projections | 4 |
| 8 | Shoulder girdle Radiographic Positions and Projections | 2 |
| 9 | Lower extremities Radiographic Positions and Projections | 4 |
| 10 | Pelvic girdle Radiographic Positions and Projections | 2 |
| 11 | Vertebral column Radiographic Positions and Projections | 4 |
| 12 | Total | 30 |

| E- PRACTICAL SESSIONS: | | |
|------------------------|--|-------|
| Week | Practical Session | Hours |
| 1 | Radiographic Positioning | 2 |
| 2 | Equipment demonstration, film identification, request indication | 2 |
| 3 | Radiographic Procedures and patient protection | 4 |
| 4 | Chest Radiographic Positions and Projections | 2 |
| 5 | Bony thorax Radiographic Positions and Projections | 2 |
| 6 | Abdomen Radiographic Positions and Projections | 2 |
| 7 | Upper extremities Radiographic Positions and Projections | 4 |
| 8 | Shoulder girdle Radiographic Positions and Projections | 2 |
| 9 | Lower extremities Radiographic Positions and Projections | 4 |
| 10 | Pelvic girdle Radiographic Positions and Projections | 2 |
| 11 | Vertebral column Radiographic Positions and Projections | 4 |

| F- Assessment Tasks: | | | | |
|----------------------|-------------------------------------|----------------|--------------|--|
| # | Type of assessment task | Week | Total Grades | |
| 1 | Assignments (quizzes, seminars, etc | Through the | 10% | |
| | | semester weeks | | |



| 2 | Written Test (1) | 8 | 20% |
|---|--------------------------|------------|------|
| 3 | Written Test (2) | 13 | 20% |
| 4 | Final Exam (practical) | 14 | 10% |
| 5 | Final Exam (theoretical) | 16 | 40% |
| | Total | 15 (weeks) | 100% |

G- LEARNING RESOURCES:

1- Required textbook:

- Clark K.C. (2005). Clark's Positioning in Radiography (12th edition), Hodder Arnold, ISBN 0-340-76390-6
- Bontrager, Kenneth L., Lampignano, John P., (2009). Textbook of Radiographic Positioning and Radiographic Anatomy (7th Ed.), Publisher: Mosby-Elsevier.

2- Essential references:

- Carlton, R. & Adler, A.(2006- 2012). Principles of Radiographic Imaging: An Art and a Science (4th Ed.). Publisher: Thomson Delmar Learning.
- Frank, E., Long, B., & Smith, B. (2012). Merrill's Atlas of Radiographic Positioning and Procedures, Vol.I (12th Ed.). Publisher: Mosby.

Notes:

- Assignments topics and requirements shall be announced by the end of Week-1, the deadline for submission is 12pm Thursday of Week-10 (each semester).
- Assignments and written assessment tasks must be verified against plagiarism, the maximum acceptable percentage is determined by the department (according to each level).
- Continuous assessment methods may include quizzes, internet searches, home-works, exercises, class activity, scratch cards, presentations, group work, etc.
- Practical exams may contain hands-on experiments, laboratory work, simulations, or demonstrations.
- Written exams will include multiple-choice questions (MCQ), short essay questions, and long essay questions.