



A- COURSE TITLE, CODE, ACADEMIC YEAR:

RADIOGRAPHIC PROCEDURES 3 (RAD-342) 1437-1438H

B- COURSE INFORMATION:

Course Code	Course Title	Credit Units			Study Level	Pre-requisites
		Total	Theory	Practical		
RAD-342	Radiographic Procedures 3	3	2	1	6 th	RAD-341
Course Coordinator		Extension		Email Address		
Dr. Fathelrehman Ahmed Elajab				faamin@taibahu.edu.sa		

C- COURSE DESCRIPTION:

The course is designed to provide knowledge and skills necessary to perform contrast media fluoroscopy procedures of the gastrointestinal tract, hepatobiliary, genitourinary systems, as well as basic angiographic procedures, Sialography Myelography, and Arthrography. Considerations are given to the evaluation of images for normal anatomy, possible pathological findings, and optimal quality.

Periodic course updates based on course reports and feedback from students and faculty members. Use of web based related reference materials. Emphasis on practical skills in laboratory settings.

D- COURSE OBJECTIVES:

1. Define the standard positioning terms related to fluoroscopy procedures.
2. Discuss equipment and supplies necessary to complete contrast media procedures.
3. Explain the correct sequence of steps to perform a given contrast media procedure.
4. Identify common indications and contraindications related contrast media procedures of the gastrointestinal tract, hepatobiliary, genitourinary systems, Angiography, Sialography, Myelography, and arthrography.
5. Explain the general considerations for contrast media procedure including the evaluation of requisition form, patient's needs, room preparation and patient communication.
6. Explain the patient preparation necessary for various contrast media procedures.
7. Identify the type, dosage and route of administration of contrast media for each procedure.
8. Explain principles of asepsis and infection control utilized in angiographic procedures.
9. Describe routine and special patient positioning and imaging techniques for a given procedure.
10. Identify specific methods to reduce radiation exposure to the patient, peers, and self during contrast media procedures.
11. Demonstrate proper use of equipment and supplies necessary to complete contrast media procedures.
12. Simulate correct performing of the routine and special positions/projections of contrast media fluoroscopy procedures.



13. Apply general rules of radiography concerning the minimal number of projections required for specific regions of the body.
14. Select correct technical factors to produce quality diagnostic images with the lowest radiation exposure possible.
15. Apply basic radiation safety and protection practices associated with contrast media procedures.
16. Critique contrast media radiographs for appropriate image quality, normal anatomy, and possible pathological findings.

E- THEORY TOPICS:

Week	Theory Topic	Contact Hours
1	General Considerations <ul style="list-style-type: none"> • Terminology • Equipment and Supplies • Contrast media purpose and types • Radiation protection 	4
2	Gastrointestinal System <ul style="list-style-type: none"> • Esophagus • Stomach and Duodenum • Small and Large Bowel 	6
3	Hepatobiliary System <ul style="list-style-type: none"> • Endoscopic retrograde cholangiopancreatography (ERCP) • T-Tube cholangiopancreatography • Surgical Cholangiography 	4
4	Genitourinary system <ul style="list-style-type: none"> • Intravenous Urography • Retrograde and Antegrade urography • Cystography and Cystourethrography • Hysterosalpingography 	6
5	Basic Angiography procedures <ul style="list-style-type: none"> • Angiocardiology • Cerebral Angiography • Thoracic Angiography • Abdominal Angiography • Peripheral Angiography 	6
6	Miscellaneous procedures <ul style="list-style-type: none"> • Sialography • Myelography • Lymphography 	4



	• Arthrography	
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F- PRACTICAL SESSIONS:		
Week	Practical Session	Contact Hours
1	Lab Orientation	4
2	Gastrointestinal System procedures	6
3	Hepatobiliary System procedures	4
4	Genitourinary system procedures	4
5	Basic Angiography procedures	6
6	Miscellaneous procedures	6

G- ASSESSMENT TASKS:			
#	Type of assessment task	Week	Total Grades
1	Assignment (quizzes, seminars, etc.....).	Over the course period	10%
2	Written test1	8th	20%
3	Written test2.	12th	20%
4	Final exam (practical).	14th	10%
5	Final exam (theoretical).	16th	40%

H- LEARNING RESOURCES:
<p><u>1- Required textbook:</u></p> <ul style="list-style-type: none"> Frank, E., Long, B., & Smith, B. (2012). Merrill's Atlas of Radiographic Positioning and Procedures, Vol.I (12th Ed.). Publisher: Mosby. Stephen Chapman, A. (2010). Guide to Radiological Procedures (4th edition) Publisher: Saunders Ltd. ISBN-10: 0702025658, ISBN-13: 978-0702025655 <p><u>2- Essential references:</u></p> <ul style="list-style-type: none"> Bontrager, Kenneth L., Lampignano, John P., (2009). Textbook of Radiographic Positioning and Radiographic Anatomy (7th Ed.), Publisher: Mosby-Elsevier

Notes:

- Assignments topics and requirements shall be announced by the end of Week-1, the deadline for submission is 12 pm Thursday of Week-10 (each semester).



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- Assignments and written assessment tasks must be verified against plagiarism, the maximum acceptable percentage is determined by the department (according to each level).
 - Continuous assessments 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.