

Department of Medical Imaging Sciences
Faculty of Health Sciences
American University of Beirut

Course number: MIMG206L
Course name: Principle of Imaging I Laboratory
Spring Term AY 2019 - 2020

Course Administration

Primary Course Instructor:

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Secondary Course Educator:

Name: Saly Abbas
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Lab Time and Location

Lab (section 1):

T 8:00 am – 10:00 am
F 13:00 pm – 15:00 pm

Lab (section 2):

R 13:00 pm – 15:00 pm
F 13:00 pm – 15:00 pm

Lab: MIS Lab, AUBMC- Phase I- Floor: SB- Room #: TBD

Course Description

The MIMG206 Lab is designed to develop pre-clinical competency and skills in routine radiographic positioning procedures.

It emphasizes on patient positioning and protection, technique selection, and x-ray equipment manipulation.

The practical instruction and application in the laboratory class uses a “hands on approach” to prepare students to practice as a radiographer.

It has been designed to give the student the opportunity to simulate in a laboratory setting the radiographic positioning terms and positions that are taught in class. The Pixy Whole-Body Phantom will be utilized to make exposures. Radiographs will be provided to label anatomy,

which gives the student the opportunity to interact and to be quizzed by the course instructor(s). Upon completion of the course the student will be ready to perform the radiographic exams in a clinical setting.

Course Learning Objectives

By the end of the course, students will be able to:

1. Manipulate the x-ray equipment as required.
2. Apply patient care considerations relevant to all radiographic procedures.
3. Describe the positioning techniques employed to complete radiographic procedures that are utilized to demonstrate specific anatomical structures for each body part.
4. State specific projections required for each radiographic examination.
5. Perform positioning skills.
6. Identify major anatomical structures and positioning landmarks of the part being radiographed.
7. Produce and evaluate images for positioning, centering, appropriate anatomy, basic overall image quality and presence of artifact.

References - Required Readings

Notes:

All lectures, reading materials and exercises will be uploaded on Moodle (via the MIMG206L Moodle Site).

Books:

Bontrager, K.L. and Lampignani, J. P. (2010). *Textbook of Radiographic Positioning and Related Anatomy*. 7th Edition. St. Louis, Missouri, Elsevier Mosby.

Long, B.W., Rollins J. H. & Smith, B. J. (2016). *Merrill's Atlas of Radiographic Positioning and Procedures (Volumes 1, 2 and 3)*. 13th Edition. St. Louis, Missouri, Elsevier Mosby.

Martensen, K.M. (2011). *Radiographic Image Analysis (Textbook and Workbook)*. 3rd Edition. St. Louis, Missouri, Saunders Elsevier..

The reference books are available in the X-Ray School library.

Useful Websites:

Website: <http://www.wikiradiography.net>

Course Requirements and Student Evaluations

	Assessment	Percent	Linked to which objectives?
A.	Attendance, preparation and lab participation	15%	All learning objectives
B.	Practicum Test 1: Upper and Lower Extremity Radiography	40%	All learning objectives
C.	Practicum Test 2: Spine Radiography	25%	All learning objectives
D.	Practicum Test 3: Thorax and Abdomen Radiography	20%	All learning objectives

N.B.: The passing grade for the course is 70%

Credits Allocated

2

Prerequisites

None

AUB/FHS Policies

✓ *Attendance*

Attendance is mandatory and attendance will be taken in each lab session. You are expected to attend all lab sessions and participate in lab activities scheduled for the Tuesday, Thursday, and Friday sessions. If you miss a lab, it is your responsibility for the work done and for any announcements made. As per AUB General Regulations, students who miss more than one-fifth of the sessions of any course in the first ten weeks of the semester (five weeks in the case of the summer term) are dropped from the course.

✓ *Academic Integrity*

Education is demanding and time management is essential. Do not hesitate to use the resources around you but do not cut corners. Cheating and plagiarism will not be tolerated. Please review the Student Code of Conduct in your handbook available on the following web page:

<https://www.aub.edu.lb/sao/Documents/Student%20Handbook%202016-2017.pdf> and familiarize yourself with definitions and penalties (p. 33).

If you're in doubt about what constitutes plagiarism, ask your instructor because it is your responsibility to know. The American University of Beirut has a strict anti-cheating and anti-plagiarism policy. Penalties include failing marks on the assignment in question, suspension or expulsion from University and a permanent mention of the disciplinary action in the student's records.

✓ *Tests*

All practicum tests must be completed within the time period specified; zero points will be given for a test if the student does not adhere to the time guidelines. Make up tests will be given only in case of documented illness, death in the family, and personal/family emergency.

✓ *Students with Disabilities:*

AUB strives to make learning experiences accessible for all. If you anticipate or experience academic barriers due to a disability (such as ADHD, learning difficulties, mental health conditions, chronic or temporary medical conditions), please do not hesitate to inform the Accessible Education Office. In order to ensure that you receive the support you need and to facilitate a smooth accommodations process, you must register with the Accessible Education Office (AEO) as soon as possible: accessibility@aub.edu.lb; +961-1-350000, x3246; West Hall, 314.

✓ *Non-Discrimination – Title IX – AUB*

AUB is committed to facilitating a campus free of all forms of discrimination including sex/gender-based harassment prohibited by Title IX. The University's non-discrimination policy applies to, and protects, all students, faculty, and staff. If you think you have experienced discrimination or harassment, including sexual misconduct, we encourage you to tell someone promptly. If you speak to a faculty or staff member about an issue such as harassment, sexual violence, or discrimination, the information will be kept as private as possible, however, faculty and designated staff are required to bring it to the attention of the University's Title IX Coordinator. Faculty can refer you to fully confidential resources, and you can find information and contacts at www.aub.edu.lb/titleix. **To report an incident**, contact the University's Title IX Coordinator Trudi Hodges at 01-350000 ext. 2514, or titleix@aub.edu.lb. An anonymous report may be submitted online via EthicsPoint at www.aub.ethicspoint.com.

✓ *Lab Rules and Regulations*

Students should refer to the MIMG206L Laboratory guidelines available on Moodle (via the MIMG206L Moodle Site).

Detailed Course Outline

Please note this is a tentative schedule. Any changes may be made at the instructor's discretion.

Date	Topic	Reading	Course Objectives
28/1 – 31/1	Topic 1: Orientation to Lab	Lab rules and regulations	LO# : 1
28/1 – 31/1	Topic 1: Manipulation of X-Ray Equipment	Lab rules and regulations	LO# : 1
4/2 – 7/2	Topic 2: Upper Extremity Radiography: Fingers, Hand and Wrist Radiography	PP presentation and PDF files on Moodle	All learning objectives
11/2 – 14/2	Topic 3: Upper Extremity Radiography: Forearm, Elbow, Humerus Radiography	PP presentation and PDF files on Moodle	All learning objectives
18/2 – 21/2	Topic 4: Upper Extremity Radiography: Shoulder Girdle Radiography	PP presentation and PDF files on Moodle	All learning objectives
25/2 – 28/2	Topic 5: Lower Extremity Radiography: Toes, Foot, Ankle and Leg Radiography	PP presentation and PDF files on Moodle	All learning objectives
3/3 – 6/3	Topic 6: Lower Extremity Radiography: Knee, Femur and Pelvis Radiography	PP presentation and PDF files on Moodle	All learning objectives
10/3 – 13/3	Topic 7: Spine Radiography: Cervical And Dorsal Spine Radiography	PP presentation and PDF files on Moodle	All learning objectives
17/3 and 20/3	Clinical Practicum Test I : Upper and Lower Extremity Radiography		
24/3 – 27/3	Topic 8: Spine Radiography: Lumbar, Sacral and Coccyx Radiography	PP presentation and PDF files on Moodle	All learning objectives
31/3 – 3/4	Topic 9: Abdomen Radiography	PP presentation and PDF files on Moodle	All learning objectives
7/4 – 10/4	Topic 10: Bony Thorax Radiography	PP presentation and PDF files on Moodle	All learning objectives
14/4 – 17/4	Clinical Practicum Test II : Spine and Abdomen Radiography		
21/4 – 24/4	Topic 11: Thoracic Viscera Radiography Topic 12: Skull Radiography	PP presentation and PDF files on Moodle	All learning objectives
28/4 – 01/5	Clinical Practicum Test III : Thorax Radiography		

N.B: 3 missing Friday sessions.

Compensatory sessions will be scheduled during the spring term on Wednesday at 14:30 pm – 16:30 pm.

Holidays

St. Maroun's Day: Sunday February 9, 2020

Annunciation Day: Wednesday March 25, 2020

Easter Vacation – Latin: Friday April 10, 2020 – Monday April 13, 2020

Easter Vacation – Greek Orthodox: Friday April 17, 2020 – Monday April 20, 2020

Labor Day: Friday May 1, 2020