

Department of Medical Imaging Sciences

Faculty of Health Sciences

American University of Beirut

Course number: MIMG209

Course name: Quality Management and Image Analysis

Spring semester AY 2019 - 2020

Course Instructor:

Name: Marlen S. Keushgerian

Office: AUBMC SB 16

Email: ms30@aub.edu.lb

Office hours: by appointment

Class time and location:

Tuesdays and Thursdays: 8:30 – 9:45

Classroom: AUBMC- Phase I- Floor: SB- Room # SB21

Course description:

This course focuses on the quality management of the imaging systems.

Emphasis is placed on quality assessment of diagnostic imaging procedures.

Course learning objectives:

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

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1. Know the difference between quality management nomenclature
2. Know the processes guiding quality and safety in imaging
3. Become familiar with quality control and radiation safety tests performed on various imaging technologies
4. Will understand the impact of every component in the imaging chain (s) on the quality of procedures undertaken

Required readings

Notes: All lectures and reading materials and exercises will be uploaded on Moodle / emailed.

Course requirements and student evaluations:

	Assessment	Percent	Linked to objectives
A.	Attendance and Class Contribution	10%	
B.	Test 1	15%	1
C.	PDCA presentation draft 1	5%	2
D.	PDCA presentation draft 2	10%	2
E.	PDCA presentation	30%	2
F.	Test 2	20%	3 – 4

N.B.: The passing grade for the course is 60/100

AUB/FHS policies

✓ Attendance

Attendance is mandatory and attendance will be taken in each lecture and lab session. You are expected to attend all classes and participate in classroom activities. If you miss a class, it is your responsibility to make up for the material missed and inquire about 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.

✓ *Missed tests*

All tests must be completed within the time period specified; zero points will be given for an exam if the student does not adhere to the time guidelines. The only delays for the final exam that will be considered by the instructor are for 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.*

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
January – February	<ul style="list-style-type: none"> • Healthcare Quality • Definitions and Dimensions of Quality • Quality process for building a strategy for quality improvement • Approaches to quality 		1 - 2
March – May	<ul style="list-style-type: none"> • Licensure • Certification • Accreditation • Quality control in diagnostic radiology • Quality control instrumentation • Reject rate analysis • Protective Shield's Test • Quality control of radiographic units • Quality control of generators • Quality control of fluoroscopic units • Quality control of mammographic units • Quality control of CT / NM/ SPECT / PET / PET CT 	<p>PPT presentations and emailed articles.</p> <p>Papp, J. (2011). Quality management in the imaging Sciences (4th ed.). Evolve: Mosby</p>	3 - 4

References

- Papp, J. (2011). Quality management in the imaging Sciences (4th ed.). Evolve: Mosby
- <https://www.acr.org/>
- <https://www.fda.gov/>
- <http://ncrponline.org/>
- <https://www.iaea.org/>
- <http://www.icrp.org/>