

Syllabus*: Radiology (161503402)

First/Second Semester 2023 /2024

COURSE INFORMATION		Course Code: 1615031403
Course Name: Radiology Semester: 4 th Year, First and Second Semesters Department: Department of Internal Medicine Faculty: Medicine	Section: Radiology Core Curriculum: Seminars, lectures and Practical sessions	
Day(s) and Time(s): Sunday till Thursday: 08:00-16:00 Classroom: Prince Hamza Hospital	Credit Hours: 4 Prerequisites: Pass All preclinical courses	
COURSE DESCRIPTION		
<p>This clinical rotation in radiology is offered to fourth year medical students. It will extend over a period of 2 weeks of blended learning (20% online education and 80% face-to-face education). The goal of this course is to present a basic introduction of the common radiological exams procedures and techniques as well as familiarize medical students with indications and contraindications of different radiological exams. The course also emphasizes basic radiological anatomy and train medical students to identify and diagnosis common and emergency pathological conditions using different radiological modalities.</p>		
<p>The course will be delivered through a combination of active learning strategies. These will include:</p> <ul style="list-style-type: none"> • PowerPoint lectures and active classroom based discussion • Collaborative learning through small groups acting in an interdisciplinary context. • Relevant films and documentaries • Video lectures • E-learning resources(representing 20%) : e-reading assignments and practice quizzes through Model and Microsoft Team 		

FACULTY INFORMATION

Name	Dr. Belal Badayneh
Academic Title:	Assistant Professor
Office Location:	Prince Hamzeh Teaching Hospital
Telephone Number:	
Email Address:	
Office Hours:	Tuesday 09.00-12.00

REFERENCES AND LEARNING RESOURCES

Required Textbook:

- Blue print radiology.
- Radiology for medical student.
- Lecture notes on radiology.
- Clinical medicine (Kumar and Clark)
- McLeod's clinical examination.

Useful Web Resources: Uptodate

Course Learning Outcomes:

1. General objectives:

By the end of this course, students are expected to:

- Be familiar with common radiological exams and procedures.
- Known indications and contraindication of different radiological exams.
- Be familiar with basic radiological anatomy.
- Be able identify and diagnosis common and emergency pathological conditions using different radiological modalities.

Participation

Class participation and attendance are important elements of every student's learning experience at The Hashemite University, and the student is expected to attend all classes. A student should not miss more than 15% of the classes during a semester. *Those exceeding this limit of 15% will receive a failing grade regardless of their performance.* It is a student's responsibility to monitor the frequency of their own absences. **Attendance record begins on the first day of class irrespective of the period allotted to drop/add and late registration. It is a student's responsibility to sign-in; failure to do so will result in a non-attendance being recorded.**

In exceptional cases, the student, with the instructor's prior permission, could be exempted from attending a class provided that the number of such occasions does not exceed the limit allowed by the University. The instructor will determine the acceptability of an absence for being absent. A student who misses more than 25% of classes and has a valid excuse for being absent will be allowed to withdraw from the course.

Plagiarism

Plagiarism is considered a serious academic offence and can result in your work losing marks or being failed. HU expects its students to adopt and abide by the highest standards of conduct in their interaction with their professors, peers, and the wider University community. As such, a student is expected not to engage in behaviors that compromise his/her own integrity as well as that of the Hashemite University.

Plagiarism includes the following examples and it applies to all student assignments or submitted work:

- Use of the work, ideas, images or words of someone else without his/her permission or reference to them.
- Use of someone else's wording, name, phrase, sentence, paragraph or essay without using quotation marks.
- Misrepresentation of the sources that were used.

The instructor has the right to fail the coursework or deduct marks where plagiarism is detected

Late or Missed Assignments

In all cases of assessment, students who fails to attend an exam, class project or deliver a presentation on the scheduled date without prior permission, and/or are unable to provide a medical note, will automatically receive a fail grade for this part of the assessment.

- Submitting a term paper on time is a key part of the assessment process. Students who fail to submit their work by the deadline specified will automatically receive a 10% penalty. Assignments handed in more than 24 hours late will receive a further 10% penalty. Each subsequent 24 hours will result in a further 10% penalty.
- In cases where a student misses an assessment on account of a medical reason or with prior permission; in line with University regulations an incomplete grade for the specific assessment will be awarded and an alternative assessment or extension can be arranged.

Student Complaints Policy

Students at The Hashemite University have the right to pursue complaints related to faculty, staff, and other students. The nature of the complaints may be either academic or non-academic. For more information about the policy and processes related to this policy, you may refer to the students' handbook.

COURSE ASSESSMENT

Course Calendar and Assessment

Students will be graded through the following means of assessment and their final grade will be calculated from the forms of assessment as listed below with their grade weighting taken into account. The criteria for grading are listed at the end of the syllabus

Assessment	Grade weighting	Deadline Assessment
Evaluation	20%	Daily
OSCE and Mini OSCE Exams	35%	End of Rotation
Final MCQ Exam	45%	End of year

Description of Exams

Test questions will predominately come from material presented in the lectures. Semester exams will be conducted during the regularly scheduled lecture period. Exam will consist of a combination of multiple choice, short answer, match, true and false and/or descriptive questions.

Homework: Will be given for each chapter, while the chapter in progress you are supposed to work on them continuously and submit in next lecture when I finish the chapter.

You are also expected to work on in-chapter examples, self-tests and representative number of end of chapter problems. The answers of self-tests and end of chapter exercises are given at the end of the book.

Quizzes: Unannounced quizzes will be given during or/and at the end of each chapter based upon the previous lectures. It will enforce that you come prepared to the class.

Grades are not negotiable and are awarded according to the following criteria*:

Letter Grade	Description	Grade Points
A+	Excellent	4.00
A		3.75
A-		3.50
B+	Very Good	3.25
B		3.00
B-		2.75
C+	Good	2.50
C		2.25
C-		2.00
D+	Pass	1.75
D	Pass	1.50
F	Fail	0.00
I	Incomplete	-

WEEKLY LECTURE SCHEDULE AND CONTENT DISTRIBUTION

NO	TOPIC	OBJECTIVES
1	Introduction radiology	<ol style="list-style-type: none"> 1. Review the basic concepts of radiation and its different types. 2. Review the sources of photons (x and gamma rays) and its interaction with matter 3. Review the principles of radiobiology and radiation protection. 4. Show example of different radiological modalities and discuss possible indications.
2	Chest radiology	<ol style="list-style-type: none"> 1. Describe different modalities used to evaluate chest pathology. 2. Introduce the students to chest radiological anatomy. 3. Expose the students to example of urgent and common chest pathology seen on chest X-ray.
3	Neuro-radiology	<ol style="list-style-type: none"> 1. Review the radiological anatomy of central nervous system. 2. Discuss the indication for different imaging modalities in Neuro-radiology. 3. Discuss the appearances of basic pathological process on CT and MRI. 4. Show example of common and emergency pathology on CT and MRI.
4	Uro-Radiology	<ol style="list-style-type: none"> 1. Explain the radiological modalities used to investigate urological problems. 2. Show examples of common pathological entities on different radiological exams.
5	Gastro-intestinal radiology	<ol style="list-style-type: none"> 1. Discuss the radiology modalities used to investigate GI problems and their indication. 2. Show examples of common pathological entities.
6	Musculoskeletal radiology	<ol style="list-style-type: none"> 1. General radiological anatomy. 2. MRI of joints & bones. 3. Common pathology of bones & joints.
7	Mammogram	<ol style="list-style-type: none"> 1. Anatomy breast 2. Benign & malignant disease. 3. Interventional.
8	Pediatric radiology	<ol style="list-style-type: none"> 1. General common congenital disease.
9	Nuclear medicine	<ol style="list-style-type: none"> 1. Introduce the medical students to the concept of nuclear medicine and its application. 2. Show example of normal exams of different nuclear medicine tests and some pathological entities. 3. Discuss the indication for common nuclear medicine exams.

10	Miscellaneous	<ol style="list-style-type: none">1. Radiologist teaching common radio-pathology.2. Interventional radiology
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