Syllabus

Cross sectional anatomy (140508433)

First Semester 2022 /2023

	COUI	RSE INFORMATION
Course Name:	Cross-Sectional Anatomy	Course Code: 140508433
Semester:	First	Section:
Department:	Department of Medical Ir	maging Advanced Medical Imaging Applications
Faculty:	Applied Medical Sciences	Core Curriculum:
		Radiological and Medical Imaging
Day(s) and Time(s): Monday: 13:00-14:00	Credit Hours: 3 (2 Theory +1 Lab)
	Wednesday: 13:00-14:00	0 Prerequisites : 140508331
Classroom: 3	12 그 3 4 2 1 2 1	
	COU	JRSE DESCRIPTION
This course allows the resonance (MR) imag anatomical structures and external landmar	e student to identify different struct es in different planes. This cours and organs in both two dimensic ks. The course covers the followir	ctures of human body on both computed tomography (CT) and magnetic se also offers the student with the opportunity to practice viewing the onal (2D) and three dimensional (3D) planes in relative to some internal ng anatomical regions: Brain, Spinal cord, Neck, Chest, Abdomen, Pelvis,
and extremities.	BE	
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The course will be	e delivered through a combination of	of active learning strategies. These will include:
Collaborative	learning through small groups activ	ng in an interdisciplinary context
Relevant film	s and documentaries.	
Video lecture	s.	
 E-learning res 	ources: e-reading assignments and	practice quizzes through Model and Microsoft Team.
	FACU	JLTY INFORMATION
Name	Ali Mohan	nmad Ibrahim Al-Radaideh
Academic Tit	le: Professor	-
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Telephone N	umber: 5590	
Email Addres	ss: ali.radaide	eh@hu.ed.jo
Office Hours	: Monday/W Sunday: 10 Please send o time.	Vednesday: 12-1:)-11 an e-mail (ali.radaideh@hu.edu.jo) to meet at any other
	REFERENCES /	AND LEARNING RESOURCES
Required Tex	tbook:	

There is no required textbook for purchase.

All compulsory weekly readings are available electronically on Microsoft Teams and "Dr-Ali Al-Radaideh_Teaching files" on Facebook group.

Suggested textbook for reading:

Sectional Anatomy for Imaging Professionals, Lorrie L. Kelley, Connie M. Petersen, Mosby

STUDENT LEARNING OUTCOMES MATRIX*

Core	Program	Course Objectives	Course Student Learning Outcomes	Assessment Method
Learning	Outcomes		outcomes	Method
Think critically and creatively in a variety of methods in order to make diagnostic decisions and solve problems.	KP1: Develop an understanding of human anatomy and physiology as it relates to health and disease and	 Understanding the directional terminology Differentiating 	 Know the different orientations and planes of CT and MRI images. Able to describe the directions on the images. 	 Exams Quizzes "On-line' reading assignments homework assignments
	acquire competency in medical terminology, documentation KP2: Understand the	between the two dimensional and three dimensional images	 Able to describe the appearance of different anatomical structures on 3D MRI and CT images. Able to understand the anatomical relationships between different structures. 	 Quizzes "On-line' reading assignments homework assignments
	principles and physics of medical imaging technologies such as general X-ray, CT, MRI, ultrasound, fluoroscopy, nuclear medicine, dental radiography, and mammography and relate medical research KP3: Develop and implement protocols for medical imaging procedures, including patient positioning, patient care, proper exposure factor selection, appropriate	3. Identifying different structures of the human body on both computed tomography (CT) and magnetic resonance (MR) images in different planes	 Able to see the same anatomical structure on single and orthogonal views. Able to understand the appearance of each anatomical structure at different anatomical levels. 	 Exams Quizzes "On-line' reading assignments homework assignments

radiation		
protection		
measures.		
demonstrating		
tashnisal		
technical		
competence,		
and the use of		
contrast agents		
(D)1		
SP1:		
Demonstrate		
depth of		
knowledge and		
integrate it of		
the basic		
sciontific		
principles of all		
medical		
imaging		
technologies for		
the		
implementation		
of various		
protocols and		
techniques and		
techniques and		
to conduct		
scientific		
research in this		
field		
SP2. Use		
croativity		
cicativity,		
thinking,		
analysis, and		
research skills		
to modify		
standard		
procedures to		
adapt to new		
circumstances		
difficult coses		
unneun cases,		
or unusual		
situations while		
maintaining		
appropriate		
medical		
imaging		
quality		
quanty.		
SP3: Evaluate		
and criticize all		
types of		
medical		
images		
CP1: Access,		
evaluate, and		
provide medical		

imaging		
requirements		
CD2.		
CI 2. Recognizing		
the mend to		
learn from		
professional		
learning,		
managing		
learning in the		
field of medical		
imaging in an		
integrated		
manner, and		
acquiring		
continuous		
learning skills		
CP3:		
Demonstrate		
professional		
identity and		
responsibility		
with patients,		
colleagues.		
employers, and		
society, with		
ethical and		
professional		
behaviors and		
attitudes in the		
practice of		
health care		
CPA: Produces		
high quality		
diagnosable		
medical images		
hy applying		
nositioning		
skills selecting		
technical		
noremeters and		
parameters, and		
protection.		

ACADEMIC SUPPORT

It is The Hashemite University policy to provide educational opportunities that ensure fair, appropriate and reasonable accommodation to students who have disabilities that may affect their ability to participate in course activities or meet course requirements. Students with disabilities are encouraged to contact their Instructor to ensure that their individual needs are met. The University through its Special Need section will exert all efforts to accommodate for individual's needs.

COURSE REGULATIONS

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 <u>should not miss more than 15%</u> 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 behaviours 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
Exam 1	20%	07/11/2022 13:00 – 14:00
Exam 2	20%	19/12/2022 13:00 – 14:00
In course assessment	10%	
Final Exam	50%	To be arranged later

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.

No make-up exams, homework or quizzes will be given. Only documented absences will be considered as per HU guidelines.

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

Letter Grade	Description	Grade Points
A+	Excellent	4.00
А		3.75
A-		3.50
B+	Very Good	3.25
В		3.00
В-		2.75
C+	Good	2.50
С		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

"Lecture hours and weeks are approximate and may change as needed"

Part One:	Introduction	Week 1	4 lecture hours
Part Two:	Brain, cranial bones, facial bones and paranasal sinuses	Week 2-7	6 lecture hours
Part Three:	Spinal cord and vertebral column	Week 8	3 lecture hours

Part Four	Neck	Week 9	3 lecture hours
Part Five:	Chest	Week 10	4 lecture hours
Part Six:	Abdomen	Week 11	4 lecture hours
Part Seven:	Pelvis	Week 12	4 lecture hours
Part Seven:	Extremities	Week 13	4 lecture hours
<u>Review</u>		<u>Week 14</u>	
<u>Oral Exam</u>		<u>Week 15</u>	
University Exan	ns	<u>Week 16</u>	

ASSESSMENT RUBRICS

Classroom Participation: Oral Presentation					
Element	Excellent	Satisfactory Needs Improvement		P o i n t s	
	8 7 6	5 4 3	2 1 0	o r	
Organization	 Therorisal logical sequence of information. ich uses readings to - s Title support opporting slide readings are included appropriately. are included appropriately. articulates "fit" - opport 	casioក្រុងម្នៃទុស្ស៊ីសេខា _O gic គ្នាrely able to adingsequence of informវីងឱាសាreading ometimes uses - rarely uses r adingទុវែទ្រទរសេខភ្នាំតd closiគីទូ ទារាខ្លួទ។ po ints; are included rarely articu rasionally articulates "fit" of readiu	cite There is little or to cite There is little or to s; logical sequence of eadings? eadings? cints; to support points; lates Title slide and/friculates cannot articulates as wildes are pot included with		
Slide Design (text, colors, background, illustrations	of readings "f with topic at to hand.	t" of readings with topic at hanc	 topic at hand . Little to no attempt has 		
size, titles, subtitles)	and appealing to viewers. responds frequently - r to questions; to	ten a Willing tation is surfarely a willir rticipant, sponds occasionally - rarely able to questions; respond to	presentation appealing to viewers never able to respond to		
Content	Presevationariovepintopfic Presevationario epintopfic compliately and in depth. -always a willing -of	resentation includes some int of view essential information point of view point of view ten a willing ten a willing ten a willing ten a some information is articipant	Presentation includes teers Presentation includes little essential point of view . information -never a willing participant		
Language	 approstates pandriately attended at	ts appropriately incorrect, or flawed. There are minor problems in sponds occasionally during role plays. There are minor problems in sponds occasionally questions, grammar, usage questions, punctuation	Information is confusing, acts - often acts inaccurate, or flawed. - inappropriately - There are persistent lays; - during role plays;, - errors in spelling, - never able to grammar usage and/or		
	 accurate - routinely provident of - Fluent and effective Fluent and effective 	dasionalify volunteers of respond to d int of view. questions; -rarely volunt point of view	eers - never volunteers - Less or not fluent and - effective		
Delivery	 Ideas were communicated demonstrates with enthusiasm, proper communicated through through	 rely unprepared; - often unprepared; - often unprepared; - often unprepared; - often unprepared; - occasionally casionally solicits; - farely solicits; - farely solicits; - farely solicite; - farely solici; - farely solicite; - farely solicite; - farely solicite; -	arred;rarely prepared; - There was great arrives - often arrives late; difficulty communicating ideas due to poor voice mstructors projection, lack of perspective outside Class work, and/or little or no eye contact.		
	 Interewere sufficient use of other non-verbal class. communication skills. Appropriate delivery pace was used. 	 Delivery pace is somewhat appropriate. 	 No use of non-verbal communication skills. Inappropriate delivery pace was used. 		
Interaction with Audience	 Answers to questions are coherent and complete. 	 Most answers to questions are coherent and complete. 	 Answers to questions are neither coherent nor complete. 		

 Answers demonstrate 	 Answers somehow 		
confidence and extensive	demonstrate confidence and	 Is tentative or unclear in 	
knowledge.	extensive knowledge.	responses.	