

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

**Course Specifications
(CS)**

**Course Specification
Radiographic Physiology -224 Rad-3**

1437-1438 H

Course Specifications

Institution	Najran University	Date of Report: 03\03\1437
College/Department	Radiological sciences College of Applied Medical Sciences	

A. Course Identification and General Information

1. Course title and code: Radiographic physiology, 224 RAD-3			
2. Credit hours: 3 (2+1) hrs.			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs) Radiological sciences			
4. Name of faculty member responsible for the course Mr. Alfatih Hassan (Faculty member in the male student section) Dr. Nagla Hussien (Faculty member in the female student section)			
5. Level/year at which this course is offered level 4/ 2nd years			
6. Pre-requisites for this course (if any) Physiology (223 PHYS-2)			
7. Co-requisites for this course (if any) N/A			
8. Location if not on main campus Main campus			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="66%"/>
b. Blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. Correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. Other	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="34%"/>
Comments:			

B Objectives

1. What is the main purpose for this course?

1. Summary of the main learning outcomes for students enrolled in the course.

By the end of the course the student will be able to:

- Understand description of physiological processes.
- Explain how the anatomical structure of body part is related to their physiological function.
- Discuss the physiological function of the body system as a whole and also specific part of the systems.
- Describe how abnormal function of the system occurs and how these are demonstrated by various imaging modalities.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- **Web based reference material was added**

C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

This course introduces to the normal functions of human body systems and its appearances on radiographs. The areas covered in this course include study of physiological function of human systems and take advantage of the functional activity of the human body systems in performing radiological investigations.

1. Topics to be Covered

List of Topics	No. of Weeks	Contact Hours
Introduction to: - Radiological terminologies - Cytology - Body electrolytes	2	8
Contrast Media	1	4
Respiratory system	1	4
Digestive system	2	8
Urinary system	2	8
Reproductive system	2	8
Circulatory system	2	8
Adenology	1	4
Nervous system	2	8

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30		30			60
Credit	2		1			3

3. Additional private study/learning hours expected for students per week.

2 hrs./week

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1-1	Describe the functions of body systems and some clinical conditions, which result from disturbances of functions and relevant to medical imaging.	<ul style="list-style-type: none"> • Lectures using multimedia • Oral presentation • Discussion • Seminar 	<ul style="list-style-type: none"> • Continuous evaluation. • Quizzes • Written mid-semester and final exam • Student presentation / seminar and discussion
1-2	Define the contrast imaging procedures of the body systems, and name the different advance imaging modalities used to show the functions of the body systems		
2.0	Cognitive Skills		
2-1	Compare the contrast imaging procedures of the body systems with the advance different imaging modalities	<ul style="list-style-type: none"> • Lectures • Demonstration • Group discussion 	<ul style="list-style-type: none"> • Continuous evaluation. • Practical exam • Written mid-semester and final exam • Quizzes • Interaction with the teacher in lectures, practical, and tutorials.
2-2	Create an effective capacity of individual learning about human physiology from reputable sources such as textbooks, references, journal articles, etc.		
2-3	Develop adequate and sound basic presentation skills about human physiology topics.		
3.0	Interpersonal Skills & Responsibility		
3-1	Demonstrate the imaging procedures and the advance imaging modalities in an ethical and respectable manner and interact responsibly with the colleges properties.	<ul style="list-style-type: none"> • Lectures • Group discussion 	<ul style="list-style-type: none"> • Student presentation / seminar and discussion. • Interaction with the teacher in lectures, practical, and tutorials.
4.0	Communication, Information Technology, Numerical		
4-1	Operate effectively the computer software applications of the machines in imaging of human physiology.	<ul style="list-style-type: none"> • Active learning • Web based assignment • Student presentations 	<ul style="list-style-type: none"> • Continuous evaluation. • Assessment of group assignment • Practical exam
4-2	Research with various resources of knowledge in order to compile a presentation or written assignment.		
5.0	Psychomotor		

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Mid-Term Exam (written & practical exam)	7 th	30 %
2	Continuous assessment	During the semester	10 %
3	Final comprehensive practical exam	17 th	20 %
4	Final comprehensive written exam	18 th	40 %
	TOTAL		100 Marks

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

- 4 hours per week
- Office hours arranged to the time table
- Student encourage to communicate on e-mail or at office
- Faculty member web page.
- Exam error analysis in class
- Feedback for each student

E. Learning Resources

1. List Required Textbooks
1. Required Text(s) <ul style="list-style-type: none"> • Introduction to Human Anatomy and Physiology: by Eldra Pearl Solomon:W.B.Saunders Company • Handbook of Anatomy and physiology for Students of Medical Radiation Technology:3rd ED Mallett.M:Jaspar printing LTD: Canada.
2. List Essential References Materials (Journals, Reports, etc.) <ul style="list-style-type: none"> • Handbook of Anatomy and physiology for Students of Medical Radiation Technology: 3rd ED Mallett.M:Jaspar printing LTD: Canada
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)
9780340939932 --- Clark's Pocket ---- Handbook for Radiographers ---- Charles Sloane ---- Hodder Education Group
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.) http://quizlet.com/5386411/radiographic-anatphysiology-i-mid-term-flash-cards/
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software. <ul style="list-style-type: none"> • Multimedia associated with the text books and the relevant websites • Lecture notes

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) <ul style="list-style-type: none"> • Lecture rooms • demonstration rooms • Anatomy Museum • Data show and computer • Viewing boxes
2. Computing resources (AV, data show, Smart Board, software, etc.) <ul style="list-style-type: none"> • Data show and computer • Viewing boxes
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) <ul style="list-style-type: none"> • All radiological modalities • X-ray machine • Fluoroscopy • Ultrasound • CT • MRI

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching <ul style="list-style-type: none"> • University online students survey (per semester). • Interviewing students about their learning experience.
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor <ul style="list-style-type: none"> • Survey (once per semester) • Interviewing students about their learning experience
3 Processes for Improvement of Teaching <ul style="list-style-type: none"> • Peer staff review of students assignment • Open discussion with a peer staff on the content of the exams and the students marks

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

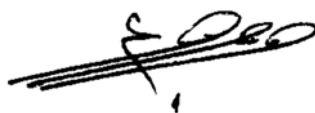
- **check marking by an independent member teaching staff of a sample of student work**
- **periodic exchange and remarking of tests**

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- **Regular meeting with a Peer reviewer**
- **Regular department committee review**
- **Regular program committee review**

Name of instructor: **Alfatih Hassan Albadri**

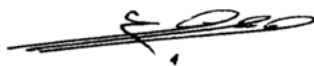
Signature:



Date Report Completed: 07/07/1438 H

Received by: **Dr. Alfatih Hasan AlbadriS** Program coordinator

Signature:



Date: 07/07/1438 H

Name of Instructor: **Dr. Nagla Hussien**

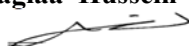
Signature:



Date Report Complete: 25/07/1438 H

Name of Course Instructor **Dr. Naglaa Hussein**

Signature:



Date Report Complete: 25/07/1438 H

Program Coordinator : **Dr. Mawahib Sayed Ahmed Aldosh**

Signature :



Date Received

09/ 08/1438