



Course Specifications

Institution:	College of dentistry.
Academic Department:	Basic Science department.
Programme:	Dentistry Programme.
Course:	Physiology.
Course Coordinator :	Prof. Dr. Kamel A. Moustafa.
Programme Coordinator:	
Course Specification Approved Date :	.../.../..... H



A. Course Identification and General Information

1 - Course title :	Physiology.	Course Code:	PSL 113.
2. Credit hours :	(4)		
3 - Program(s) in which the course is offered:	Dentistry.		
4 – Course Language :	.....English.....		
5 - Name of faculty member responsible for the course:	Prof. Dr. Kamel A. Moustafa.		
6 - Level/year at which this course is offered :	Level three & four		
7 - Pre-requisites for this course (if any) :	<ul style="list-style-type: none"> 		
8 - Co-requisites for this course (if any) :	<ul style="list-style-type: none"> Anatomy. 		
9 - Location if not on main campus :	(Az Zulfi)		
10 - Mode of Instruction (mark all that apply)			
A - Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	100 %
B - Blended (traditional and online)	<input type="checkbox"/>	What percentage? %
D - e-learning	<input type="checkbox"/>	What percentage? %
E - Correspondence	<input type="checkbox"/>	What percentage? %
F - Other	<input type="checkbox"/>	What percentage? %
Comments :			

B) Objectives:

What is the main purpose for this course?

This course is aimed to understand the basis of various physiological functions of the body from the cell as the smallest functional component of the body to the function of various organs, and systems.

Briefly describe any plans for developing and improving the course that are being implemented :

This course is designed to provide students with an understanding of the function & regulation of the human body and physiological integration of the organ systems to maintain homeostasis. Course content will include Neural & Hormonal homeostatic control mechanisms, as well as study of the Musculoskeletal, Circulatory, Respiratory, Digestive, Urinary, Immune, Reproductive, and Endocrine Systems.



C. Course Description

1. Topics to be Covered

List of Topics	No. of Weeks	Contact Hours
1st Semester		
Introduction.	1	6
Body homeostasis.	2	6/W
The blood constituents.	3	6/W
The immune system.	2	6/W
The digestive system.	2	6/W
Metabolic pathways.	2	6/W
The respiratory system.	1	6
Revision.	1	6
2nd Semester		
Introduction.	1	6
Cardio-vascular system.	2	6/w
Lymphatic system.	1	6
Urinary system.	1	6
Male reproductive system.	1	6
Female reproductive system.	1	6
Endocrine system.	3	6/W
Nervous system.	2	6/W
Special sense.	1	6
Revision	1	6

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

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	2	.....	4	.....	.....	6
Credit	2	.....	2	.....	.....	4

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

6





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

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Integration of the organ systems to maintain constancy of the internal environment.	Lecture.	Exam.
1.2	Narrate the contribution of each organ system to the maintenance of homeostasis.	Lecture.	Exam.
1.3	Explain the normal functioning of all the organ systems of the body and their interactions.	Lecture.	Exam.
1.4	Describe the physiological response and adaptations to environmental stresses, infectious organisms, and toxins.	Lecture.	Exam.
1.5	Role of the Autonomic Nervous System in regulating organ function.	Lecture.	Exam.
1.6	Elucidate the physiological aspects of normal growth and development.	Lecture.	Exam.
2.0	Cognitive Skills		
2.1	Student should be able to know the basic aspects of physiology and body functions.	Lecture.	Exam.
2.2	Student should be able to know the function of cell organelles, and cell specialization.	Lecture.	Exam.
2.3	Student should be able to know the functional division of the Nervous System (NS).	Lecture.	Exam.
2.4	Student should be able to know the function of NS and the exerted control on key body organs.	Lecture.	Exam.
2.5	Student should be able to know the human endoskeleton, movement and locomotion.	Lecture.	Exam.
2.6	Student should be able to know the chemical messengers and Endocrine system.	Lecture.	Exam.
2.7	Student should be able to know the cardiovascular system and Hepatic circulation.	Lecture.	Exam.
2.8	Student should be able to know the neural control of blood volume and pressure.	Lecture.	Exam.
2.9	Student should be able to know the body fluid compartments and the blood as a tissue and clotting.	Lecture.	Exam.
2.10	Student should be able to know the renal system and	Lecture.	Exam.





	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
	Homeostasis.		
2.11	Student should be able to know the respiratory system and gas exchanges.	Lecture.	Exam.
2.12	Student should be able to know the respiratory-renal adjustment of acid base.	Lecture.	Exam.
2.13	Student should be able to know the digestive system.	Lecture.	Exam.
2.14	Student should be able to know the Pancreatic-Hepatic functions.	Lecture.	Exam.
2.15	Student should be able to know the reproductive system.	Lecture.	Exam.
2.16	Student should be able to know the ovarian, Hormonal and menstrual cycles.	Lecture.	Exam.
3.0	Interpersonal Skills & Responsibility		
3.1	Classify the students into working groups to perform the analytical tests.	During lecture.	Recognition.
3.2	Teaching students how to deal with the patient and the proper way to take blood samples from him.	During lecture.	Recognition.
3.3	Teaching students how to know the patient's symptoms and diagnose his sick.	During lecture.	Recognition.
3.4	Teaching students how to deal with cases of infectious diseases and how to avoid infection and exposure to others.	During lecture.	Recognition.
3.5	Teaching students how to deal with the psychological state of the patient and directed him to the correct way to follow up his illness.	During lecture.	Recognition.
3.6	Familiarize students with laboratory common mistakes and how to handle them.	During lecture.	Recognition.
4.0	Communication, Information Technology, Numerical		
4.1	Teaching students how to obtain scientific information from various websites.	During lecture.	Exam.
4.2	Introduce students to scientific famous sites and how to access them.	During lecture.	Exam.
4.3	Teaching students the units used in the conduct of medical tests and how to transfer from one unit to another.	During lecture.	Exam.
4.4	Teaching students how to calculate the final	During	Exam.





	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
	result of the laboratory experiments, with extreme precision.	lecture.	
4.5	Teaching students how to compare the results of patients with normal range.	During lecture.	Exam.
4.6	Teaching students how to use statistical equations to illustrate the results of patients and comparing them to each other.	During lecture.	Exam.
5.0	Psychomotor		
5.1	Teaching students how to work in a team and scientific cooperation.	During lecture.	Recognition.
5.2	Teaching students how to conduct laboratory experiments agree with each other, including the timeframe.	During lecture.	Recognition.
5.3	Teaching students how to deal with hazardous materials found in medical labs and hospitals.	During lecture.	Recognition.
5.4	Teaching students how to deal with dangerous biological fluids and how to get rid of them.	During lecture.	Recognition.
5.5	Teaching students how to handle common laboratory errors and solve problems.	During lecture.	Recognition.
5.6	Teaching students how to prevent pollution of the environment with medical waste, whether chemical or biological.	During lecture.	Recognition.

5. Schedule of Assessment Tasks for Students During the Semester:

	Assessment task	Week Due	Proportion of Total Assessment
1	1 st midterm exam	6	15%
2	2 nd midterm exam	12	15%
3	Quiz	3	4%
4	Research	4	4%
5	Presentation	13	2%





6	Practical exam	14	20%
7	Final Exam	14	40%
8	Total		100%

D. Student Academic Counseling and Support

Students are supported academic guidance during office hours and provide them with guidance and advice, as well as scientific knowledge of students' problems and how to solve it.

E. Learning Resources

1. List Required Textbooks :

- Human Anatomy & Physiology, Elaine N. Marieb and Katja Hoehn Pearson, Benjamin Cummings, 8th edition, 2010.
- Essentials of Human Anatomy & Physiology, Elaine N. Marieb, Pearson, Benjamin Cummings, 10th edition, 2009.

2. List Essential References Materials :

- **Journal of human physiology.**
- **Journal of physiology.**

3. List Recommended Textbooks and Reference Material :

- *Human Anatomy & Physiology, Elaine N. Marieb and Katja Hoehn Pearson, Benjamin Cummings, 8th edition, 2010.
- *Essentials of Human Anatomy & Physiology, Elaine N. Marieb, Pearson, Benjamin Cummings, 10th edition, 2009.

4. List Electronic Materials :

- **www.pubmed.com.**
- **Prof.Dr. Kamel A. Moustafa site in the Majmaah university site (mu.edu.sa)**

5. Other learning material :

- **Perform medical analysis using patient cases from hospitals.**
- **Prepare body function tests.**
- **Discuss with students about different diseases of body system.**

F. Facilities Required

1. Accommodation

- **A class room with a seating capacity of 30 students, equipped with**





a projector and smart board.

- **A well-equipped laboratory with advanced clinical biochemistry equipment.**

2. Computing resources

- **Computer classroom.**
- **Internet connection.**

3. Other resources

- **General knowledge.**

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching:

- **Make questionnaires.**
- **Perform theoretical examination.**
- **Make seminars.**

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor :

- **Make meetings with groups of students to discuss the contents of the course, method of teaching to evaluate the course and the instructor.**

3 Processes for Improvement of Teaching :

- **Make meeting every week in the department to update the status of each student and the difficulties felt by the colleague will be resolved accordingly.**
- **The power point presentation of each lecture is distributed to all the staff members of the department for evaluation and suggestions for improvement.**
- **Teachers will be subjected to go for up gradation of knowledge by attending the relevant conferences and will be encouraged to carry on a self-improvement.**

4. Processes for Verifying Standards of Student Achievement

- **Make 1st midterm, 2nd midterm, quiz and final examinations.**
- **Make practical examination.**
- **Perform a questionnaire to evaluate the student's experience.**

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





- **Make meeting every week in the department to update the status of each student and the difficulties felt by the colleague will be resolved accordingly.**
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- Teachers will be subjected to go for up gradation of knowledge by attending the relevant conferences and will be encouraged to carry on a self-improvement.

Course Specification Approved
Department Official Meeting No (.....) Date ... / / H

Course's Coordinator

Name : Prof.Dr. Kamel A.
Moustafa
Signature :
Date : .../ ... / H

Department Head

Name : Ass. Prof. Fekry
Shata
Signature :
Date : .../ ... / H

