Model (No 12)
Course Specification : Medical Biochemistry

University : جامعة أسوان
Faculty : كلية الطب
Department :

1- Course data :-

Code:	24	Course name:	Medical Biochemistry	Study year:	الفرقة الثانية	
Specialization:	• Medical Bachelor of medicine and surgery					
Teaching Hours:						
	Lecture:	90	Tutorial:	10	Practical:	50
Number of units:	11					

2- Course aims :-

1. Fundamental understanding of metabolic processes of bio-molecules and their correlation to medical diseases
2. Integrated basic knowledge of biochemistry
3. Advanced information and technology concerning bio-molecules as regard their role in diagnostic and therapeutic medicine.

3- Intended learning outcomes of course (ILOS) :-

a- Knowledge and understanding

1. [a10] Fundamental understanding of chemistry of bio-molecules and metabolic processes with correlation to medical diseases
2. [a11] Integrated basic knowledge of molecular biology and biochemistry
3. [a12] Advanced information and technology concerning the human genome and bio-molecules as regard their role in diagnostic and therapeutic medicine

b- Intellectual skills

1. [b18] Interpret the structural changes in cells to understand the underlying cause of different diseases
2. [b19] Solve problems related to structural dysfunction

c- Professional and practical skills

No data found.

d- General and transferable skills

1. [d1] Communicate effectively with patients and their families
2. [d2] Deliver information to the patients and their families in a human and respectable manner
3. [d16] 6) Communicate ideas and arguments effectively
4. [d19] 9) Practice self and peer evaluation
5. [d28] Effectively manage time

4- Course contents :-

No	Topics	Week	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Introduction and Concept of Metabolism					
2	Signal transduction					
3	Carbohydrate Metabolism					
4	Bioenergetics and Electron Transport Chain					
5	Lipid Metabolism					
6	Diabetes Mellitus					
7	Metabolism of Proteins & Amino Acids					
8	Integration of Metabolism					
9	Xenobiotic Metabolism					
10	Nutrition & Health					

5- Teaching and learning methods :-

S	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Lectures				
2	Tutorials				
3	Practical				
4	E-learning classes				
5	Directed Self Learning				

6- Teaching and learning methods of disables :-

1. Revision lectures and tutorial classes outside schedule
2. Assignments

7- Activities and sources of teaching and learning :-

S	Activities and resources	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Halls for tutorials				
2	Computer lab for e-learning classes and e-exams				
3	Audiovisuals				

8- Student assessment :-

a- Student assessment methods

No	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Formative Assessment				
2	Continuous Assessment				
3	Midyear				
4	Final				

b- Assessment schedule

No	Method	Week
1	Formative Assessment	2-12
2	Home Assignments	all through year
3	Continuous Assessment	week 10, week 22
4	Practical Exam, Written Exam, Oral Exam	END of YEAR

c- Weighting of assessments

No	Method	Weight
1	Mid_term examination	10
2	Final_term examination	50
3	Oral examination	10
4	Practical examination	20
5	Semester work	10
6	Other types of asessment	0
Total		100%

9- List of references

S	Item	Type
1	Harper's Biochemistry (28th edition) Robert K. Murray , Daryl K. Granner , Peter A. Mayes , Victor W. Rodwell	Books

2	Textbook of Biochemistry with Clinical Correlations (8th edition) Thomas M. Devlin	Books
3	Lehninger Principles of Biochemistry (6th edition) David L. Nelson, Michael M. Cox	Books
4	Biochemistry (3rd Edition) Christopher K. Mathews , Kensal E. van Holde, Kevin G. Ahern	Books
5	Lippincott's Illustrated Reviews: Biochemistry (5th edition) Richard A. Harvey, Denise R. Ferrier	Books

10- Matrix of knowledge and skills of the course

S	Items	Details	Basic knowledge	Intellectual skills	Professional skills	General skills
	Course contents	Introduction and Concept of Metabolism				
		Signal transduction				
		Carbohydrate Metabolism				
		Bioenergetics and Electron Transport Chain				
1		Lipid Metabolism				
		Diabetes Mellitus				
		Metabolism of Proteins & Amino Acids				
		Integration of Metabolism				
		Xenobiotic Metabolism				
		Nutrition & Health				
2	Teaching and learning	Lectures				
		Tutorials				
		Practical				

	methods	E-learning classes				
		Directed Self Learning				
3	Activities and sources of teaching and learning	Halls for tutorials				
		Computer lab for e-learning classes and e-exams				
		Audiovisuals				
4	Student assessment	Formative Assessment				
		Continuous Assessment				
		Midyear				
		Final				

Course Coordinator(s): -

عبد الله محمود عبدالله علي

Head of department: -

عبد الله محمود عبدالله علي