Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Department of Medical Laboratory Sciences
Course Syllabus LM721

Course Information	
Course Title	Medical biochemistry (3 credit hours)
Course Code	LM 721
Prerequisites	NA
Course Website	www.Iww.com
Instructor	Professor Nabil Bashir, Ziad Jraisat, and Dr. Saleem Bani Hani
Office Location	M5 level - 4
Office Phone #	23874
Office Hours	TBA
E-mail	-
Teaching Assistant(s)	NA

Course Description

This course is an advanced course in biochemistry for master's students. Topics include the structure, function, and metabolism of the main macromolecules in the human body (proteins, enzymes, carbohydrates, lipids, nonprotein nitrogen compounds, nucleic acids, vitamins, and other specialized products). The course is also includes a description of the biochemistry of selected common human diseases.

Textbook	
Title	Textbook of biochemistry with clinical correlations
Author(s)	Thomas M. Devlin
Publisher	WILEY
Year	2011
Edition	Seventh edition
Other references	Handouts

Assessment		
Assessment	**Expected Due Date**	**Percentage**
First Exam	5th week of the semester	25%
Second Exam	10th week of the semester	25% + 10% Presentation
Final Exam	As determined by registrar	40%

Course Objectives	Percentage
. 1. To present a clear and precise discussion of the molecular basis of life of eukaryotic cells, with an emphasis on those of human tissues.	50%
. 2. To relate the biochemical processes at the cellular level to the physiological processes of the whole human body.	25%
. 2. To illustrate how biochemistry research has led to an understanding of the causes of various human diseases.	25%

Teaching & Learning Methods

- Lecture with discussion
- Brainstorming
- Case studies
- Problems solving

Teaching duration: 16 weeks

Objective	Reference(s) Handouts
1, 3	Chapters: 10, 11, 14, 15, 16, 17, 23, 26,27 + Handouts
2, 4	Chapters: 1, 16 + Handouts
5, 6	Handouts

Useful Resources

University library, Internet, Articles (assigned by the instructor)

Course Content (lectures)		
Week	**Topics**	**Chapter in Textbook (handouts)**
1	Introduction to medical biochemistry: basic chemistry of carbohydrates, proteins, lipids, and Nucleic acids.	**1 Handouts**
2	Buffer systems	**1 Handouts**
3	Protein structure	**3 Handouts**
4	Enzymes, Coenzymes, vitamins	**10 Handouts**
5	Enzyme kinetics	**10 Handouts**
6	Carbohydrate metabolism- *regulation of blood glucose*	**15, 16, 22 Handouts**
7	TCA, Oxidative phosphorylation *Formation of reactive oxygen species, antioxidants, and oxidative stress.*	**14 Handouts**
8	Metabolism of lipids	**17, 18 Handouts**
9	Metabolism of cholesterol	**18 Handouts**
10	Urea metabolism	**19 Handouts**
11	Nucleic acid metabolism	**20 Handouts**
12	Conversion of amino acids to specialized products; heme, creatinine.	**19 Handouts**
13	Nucleotide metabolism	**20 Handouts**
14	Vitamins and minerals	**26 Handouts**
15	Review	
16	Final Exam	

Additional Notes
Attendance policy The students are required to attend all the classes. Absence for more than 15% of the classes without acceptable excuses will lead to dismissal from the course. If it is an emergency (unplanned) absence, the student is still required to provide an acceptable excuse. **Expected workload:** The student must attend the classes, solve the assignment, prepare for the group discussions, and attend and pass the exams. Each student must make a presentation in one of the biochemistry topics assigned by the instructor. **Feedback:** Any feedback from the students regarding the progression in the course can be discussed with the instructor (Dr.Nabeel Albasheer) at the assigned office hours:

Course Content		
Week	**Title of the Lecture**	**Lecturer**
1	Introduction to medical biochemistry: basic chemistry of carbohydrates, proteins, lipids, and Nucleic acids.	Prof. Nabil Bahsir
2	Buffer systems	Prof. Nabil Bahsir
3	Protein structure	Prof. Nabil Bahsir
4	Enzymes, Coenzymes, vitamins	Prof. Nabil Bahsir
5	Enzyme kinetics	Prof. Nabil Bahsir
6	Carbohydrate metabolism- *regulation of blood glucose*	Prof. Nabil Bahsir
7	TCA, Oxidative phosphorylation *Formation of reactive oxygen species, antioxidants, and oxidative stress.*	Prof. Nabil Bahsir
8	Metabolism of lipids	Prof. Nabil Bahsir
9	Metabolism of cholesterol	Prof. Nabil Bahsir
10	Urea metabolism	Prof. Nabil Bahsir
11	Nucleic acid metabolism	Prof. Nabil Bahsir
12	Conversion of amino acids to specialized products; heme, creatinine.	Prof. Nabil Bahsir
13	Nucleotide metabolism	Prof. Nabil Bahsir
14	Vitamins and minerals	Prof. Nabil Bahsir
15	Review	Prof. Nabil Bahsir
16	Final Exam	

The book â€œEssentials of Biochemistryâ€ primarily focused on the essential biochemical concepts that are much helpful for medical students. The study of biochemistry helps in finding remedies for a variety of ailments that afflict human beings.Â Chatterjee textbook of medical biochemistry is one of the tops and best selling medical biochemistry book read by many students across the world. Medical School | Medical Students | Medical Pictures | Medical Books To Read | Medical Books Studying | Medical Humor | Medical Examination | Medical Ebooks | Medical Ebooks Download | Medical Textbooks | Free Medical | PDF Books | Biochemistry PDF.Â Clinical Chemistry: Principles, Techniques, and Correlations. Clinical Chemistry textbook: new edition 2013. Start by marking â€œTextbook of Biochemistry With Clinical Correlationsâ€ as Want to Read: Want to Read savingâ€¦ Want to Read.Â Weâ€™d love your help. Let us know whatâ€™s wrong with this preview of Textbook of Biochemistry With Clinical Correlations by Thomas M. Devlin. Problem: Itâ€™s the wrong book Itâ€™s the wrong edition Other. Thomas M. Devlin, Ph.D. This book was set in ITC Garamond Light by BiComp Incorporated Textbook of Biochemis Textbook of Biochemistry - For Medical Students, 6th Edition. 672 PagesÂ·2013Â·25.45 MBÂ·60,506 Downloads. VAIDYANATHAN MBBS MD. Clinical Associate Professor, Department of Biochemistry e-mail: info Textbook Environmental Monitoring and Characterization. 404 PagesÂ·2004Â·15.87 MBÂ·8,184 DownloadsÂ·New! Environmental Monitoring and Characterization is an integrated, hands-on resource for monitoring Textbook of Medical Biochemistry. 894 PagesÂ·2013Â·20.76 MBÂ·18,033 Downloads. Fifth Edi

This is a terrific textbook, as were the previous editions, but the web site for Devlin's Biochemistry 7e is a complete farce. The instructions say to select a chapter from a dropdown menu, for which you receive links to a relevant set of additional materials. But every single chapter selection gives exactly the same set of three links: Animated Figures, Guided Explorations, and Interactive Exercises, and regardless of the chapter chosen, each of these three links contains exactly the same set of additional links.Â excellent book of biochem which links clinical biochem with the actual biochem. exceptionally well written,with easy flow. Its one of those rare books in medicine which ticks all the boxes.well suited at all levels,espcially for all those who are pursuing to be a physician. Read more. A comprehensive and fully updated edition filled with over 250 clinical correlations This book presents a clear and precise discussion of the biochemistry of eukaryotic cells, particularly those of mammalian tissues, relates biochemical events at a cellular level to the subsequent physiological processes in the whole animal, and cites examples of abnormal biochemical processes in human disease. The organization and content are tied together to provide students with the complete picture of biochemistry and how it relates to human diseases. Loaded with new material and chapters and brimming with

very low density lipoprotein. Page iii. Textbook of Biochemistry with Clinical Correlations: Fourth Edition Edited by Thomas M. Devlin, Ph.D. Professor Emeritus Department of Biochemistry MCPâˆ™Hahnemann School of Medicine Allegheny University of the Health Sciences Philadelphia, Pennsylvania. Page iv. Address All Inquiries to the Publisher WileyLiss, Inc., 605 Third Avenue, New York, NY 101580012 Copyright Â© 1997 WileyLiss, Inc. Printed in the United States of America.Â Library of Congress CataloginginPublication Data Textbook of biochemistry: with clinical correlations/edited by Thomas M. Devlin â€" 4th ed. p. cm. Includes bibliographical references and index. ISBN 0471154512 1. Biochemistry. 2. Clinical biochemistry. classic clinical presentations 2016-04-19. c4t2 dustin's practice test 2016-04-17. c4l3 fxnal histology: upper gi 2016-03-07. Biochemistry with. Clinical. Correlations. Thomas M. Devi in Editor. Textbook of. BIOCHEMISTRY. With Clinical Correlations. This page intentionally left blank. Textbook of. BIOCHEMISTRY. With Clinical Correlations EDITED BY. Thomas M. Devlin Professor Emeritus Department ofBiochemistry and Molecular Biology College ofMedicine Drexel Universiry. John Wiley & Sons, Inc. IMAGE ON FRONT COVER Model of a p artial telomerase elongation complex. , and was printed and bound Robert A. Harris, Ph.D. Textbook of Biochemistry Textbook of Bioch Textbook of Biochemistry - For Medical Students, 6th Edition. 672 PagesÂ·2013Â·25.45 MBÂ·73,979 Downloads. VAIDYANATHAN MBBS MD. Clinical Associate Professor, Department of Biochemistry e-mail: info Textbook of Medical Biochemistry. 894 PagesÂ·2013Â·20.76 MBÂ·30,660 Downloads.), such as spina bifida. Textbook of Medical Biochemistry Textbook of Medical Biochemistry, Marksâ€™ Basic Medical Biochemistry: A Clinical Approach (5th Edition). 2,327 PagesÂ·2017Â·60.53 MBÂ·52,662 DownloadsÂ·New! and study M Textbook of Biochemistry, first published in 1928, is scientific textbook authored by Alexander Thomas Cameron. The textbook became a standard of its field, and, by 1948, had gone through six editions, in addition to one Chinese and two Spanish editions. Textbook of Biochemistry consists entirely of lecture manuscripts given by the author, Alexander Thomas Cameron, over several years. Cameron had lectured at the University of Manitoba since 1909, but was never a fluent speaker. To compensate for this