**Kurdistan Regional Government**

**Ministry of Higher Educationand Scientific Affairs**

**University of Duhok**

**Directorate of Quality Assurance**



**College ofmedicine- Department of Biochemistry**

**Course book for second year students**

**Academic year 2015- 2016**

**Course Book**

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| **Course title** | **Biochemistry** | | |
| **lecturer in charge** | Kajeen rasheed hussein | | |
| **Dept/ College** |  | College of medicien/Biochemistry | |
| **Contact details** | Tel:00967504106887 | Email: Ahmed.Barwary94@yahoo.com | |
| **Coordinator’s name** |  | | |
| **Contact details** |  | |  |
| **‌Course overview:**  This course provides students with knowledge of clinical biochemistry and practical tests estimations and develops biochemical clinical thinking ,and explain how sampling and type of samples getting and analysis of these samples and include estimation of glucose, renal ,liver function tests , calcium ,phosphate , estimation, lipid profile, iron,urine and CSF analysis ,hormonal assay and their relation diseases. | | | |
| **Course Objectives:**  1-Discus the clinical biochemistry.  2-Outline the main tests of the clinical biochemistry.  3-Introduce and discus the relevance and application of biochemistry in the process of development a differential diagnosis, treatment and follow up using clinical case studies.  4-Discuss and integrate the clinical significance of tests in health and disease. | | | |
| **Course Reading List and References‌**  Richard A. Harvey .Lippincott's illustrated reviews  Robert K. Murray. Harper's illustrated biochemistry  David L. Nelson. Lehninger principles of biochemistry  Williams. Basic and applied dental biochemistry  John W. Baynes. Medical biochemistry  DM. Vasudevan. Textbook of biochemistry  Lecture notes in clinical biochemistry  Dawn B. Marks. Basic medical biochemistry  Barbara Hansen .Biochemistry and medical genetic | | | |

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| **Subjects: Biochemistry** | | |
| **lecturer’s name:**Kajeen rasheed hussein | | |
| **Contacts:** | Tel/00967504106887 | Email:Ahmed.Barwary94@yahoo.com |
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| curriculum vitae of lecturer  PRESENT AND PREVIOUSPOSITION:  2007-2016: Department of clinical biochemistry in college of medicine, University of Duhok.  **ACTIVITES**:  **Teaching and Training**  Teaching clinical biochemistry/practice course for second class medical and dentistry students.  **PUBLICATIONS:**  1 publications in Clinical Biochemistry, published in Duhok Medical Journal. | | |
| **Subject objective:**  1-Discus the clinical biochemistry.  2-Outline the main tests of the clinical biochemistry.  3-Introduce and discus the relevance and application of biochemical tests.  4-Discuss and integrate the clinical significance of tests in health and disease. | | |
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| **Student's obligation**  The final assessment of the students indicated good attendance and they follow the department regulations with regard to completion of all tests in the laboratory, theoretical and practical examinations | | |
| **Forms of teaching**  Data show, PowerPoint and whiteboard | | |
| **Assessment scheme**  Assessment scheme of our department depend on attendance of students to lecture room, monthly quizzes, coarse exams, reports and midyear and final year exams. | | |
| **Student learning outcome:**  The vision is to meet and sustain the standards and requirements for accreditation by college of medicine about biochemistry of human disease that serve as an academic back-up resource for the professional field of medicine  The mission is to offer students of medicine and medical sciences a good standard of skill and knowledge of common clinical disorders and understand the basic principles of laboratory utilization in the diagnosis and management of disease.  The objectives are to enables students of medicine and medical sciences maintaining a high standard of patient care through the diagnosis and monitoring services of clinical biochemistry laboratory and to provide medical biochemistry, as well as the research scientists in this field. | | |
| **Scientific contents of the subject:**  (1)-Introduction (3 hours)  1-Collection and handling of specimens  2-Titrimetric analysis  3-Colorimetric analysis  (2)-Carbohydrates ( 3Hours)  1-Estimation of glucose  2-Estimation of glucose tolerance  (3)-Inorganic components and electrolytes ( 9Hours)  1-Estimation of phosphorus  2-Estimation of iron  3-Estimation of total iron binding capacity  4-Estimation of calcium  5-Estimation of chloride  (4)-Non-protein nitrogen compounds (renal function test) (6 hours)  1-Estimation of urea  2-Estimation of uric acid  3-Estimation of creatinine  (5)-Liver function tests (3 Hours)  1-Estimation of total bilirubin  (6)-Protein and hemoglobin (6 Hours)  1-Estimation of total protein  2-Estimation of albumin  3-Estimation of Hb by chemical method  (7)-Enzymes (12 Hours)  1-Determination of activity of acid phosphatase  2-Determination of activity of alkaline phosphatase  3-Determination of activity of GPT  4-Determination of activity of GOT  5-Determination of activity of amylase  6-Determination of activity of LDH  (8)-Lipids (9Hours)  1-Estimation of cholesterol  2-Estimation of HDL cholesterol  3-Estimation of triglycerides | | |
| **Subject references:‌**  Richard A. Harvey .Lippincott's illustrated reviews  Robert K. Murray. Harper's illustrated biochemistry  David L. Nelson. Lehninger principles of biochemistry  Williams. Basic and applied dental biochemistry  John W. Baynes. Medical biochemistry  DM. Vasudevan. Textbook of biochemistry  Lecture notes in clinical biochemistry  Dawn B. Marks. Basic medical biochemistry  Barbara Hansen .Biochemistry and medical genetic  Magazines and review (Internet) | | |
| **Examinations**  1-  2- | | |

**Student’s Feedback for the topic**

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| **Title of Subject:** | | |
| **Course:**  **Date:**  **Year:**  **lecturer:** | | |
| **Department:** | **School** | **University:** |

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| **No.** | **Evaluation Questions** | **Level (1-5)** | **More Remarks – Objective ones** |
| 1 | The objectives and key messages of the subject were clear? |  |  |
| 2 | The contents of the subject were useful and relevant to the main goal of the course? |  |  |
| 3 | The materials were prepared carefully as needed |  |  |
| 4 | The lecturer while lecturing tried to analyze the principles, contents and the important points of the subject simply and properly? |  |  |
| 5 | The lecturer came into the classroom on time and was committed to the duration of the lecture? |  |  |
| 6 | The lecturer’s behaved calmly and respectfully during the lecture? |  |  |
| 7 | The slides used in the lecture were clear and attractive? |  |  |
| 8 | The lecturer gave the students chance to ask questions and tried to answer them fully? |  |  |
| 9 | The reading sources are new and compatible with the subject. |  |  |
| 10 | Total of the levels |  |  |

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| **Evaluation Measuring Tool** | | | |
| **1-2 Not Good** | **2-3 Average** | **3-4 Good** | **4-5 Very Good** |
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