



Isfahan University of Medical Sciences

## Course Plan

### Course Title: Biochemistry of Discipline-Practical

<b>Degree:</b> MBBS	<b>Course Code:</b> 3114049
<b>Academic Year:</b> 2022-23/ <b>Term:</b> 1	<b>Classroom Location:</b> General Biochemistry lab, Department of Clinical Biochemistry, School of Pharmacy, IUMS
<b>Course credit:</b> 0.4 unit	<b>Days &amp; hours of Class Time:</b> Monday: 14-16
<b>Starting Date:</b> Mon 14 <sup>th</sup> Nov 2022	<b>Course leader:</b> Professor Pourfarzam ( <b>Office Phone:</b> 7045)
<b>Email:</b> pourfarzam@pharm.mui.ac.ir	<b>Office Address:</b> Dept of Clinical Biochemistry, School of Pharmacy, IUMS

#### Introduction and main aims & objectives of the course:

The practical biochemistry course aims at providing the medical students with an understanding in outline of the molecular basis of health and diseases, as well as an appreciation of the significance of biochemical application in diagnosis and therapeutics. This is achieved through the diagnosis of a number of illnesses using artificial “patient material” (i.e. blood or urine with similar appearance to that of real patient samples and suitable for the experiments).

#### Specific Objectives:

The knowledge acquired in Biochemistry should help the student to integrate molecular events with structure and function of the human body in health and disease. The aim of biochemistry of discipline practical class is to enable students to acquire basic practical skills for biochemical investigations in order to support clinical diagnosis of common disorders in the community, and to promote research for those students who may be interested in research activities.

At the end of this practical course, students are expected to be able to:

1) Conduct conventional and selected special investigations listed below, 2) Analyse and interpret laboratory data, and, 3) Demonstrate skills for solving clinical problems to arrive at diagnosis using laboratory data.

- Determination of Plasma Glucose and interpretation of oral glucose tolerance test and diagnosis of diabetes
- Determination of Serum Cholesterol & Triglycerides and its application in diagnosis of dyslipidemias.
- Determination of Urinary & Serum Creatinine and interpretation of Creatinine clearance.
- Determination of Serum Bilirubin and its application in diagnosis of liver disease and jaundice.
- Determination of Serum LDH activity and its application in investigation of tissue damage.

## Time Table 2022-23\_1 (1401-02\_1) - Biochemistry of Discipline-Practical

Session	Title	Date
1	Determination of Plasma Glucose and interpretation of oral glucose tolerance test	Mon 14 <sup>th</sup> Nov 2022
2	Determination of Serum Cholesterol & Triglycerides	Mon 21 <sup>st</sup> Nov 2022
3	Determination of urinary & Serum Creatinine and interpretation of Creatinine clearance	Mon 28 <sup>th</sup> Nov 2022
4	Determination of Serum Bilirubin	Mon 5 <sup>th</sup> Dec 2022
5	Determination of Serum LDH / CPK activity	Mon 12 <sup>th</sup> Dec 2022

Evaluation and Exams	
Attendance, Discipline, in-class evaluation	50%
Final Exam	50%
<b>Students MUST obtain AT LEAST %50 in each section in order to pass</b>	

### INFORMATION AND POLICIES

1. The Department of Biochemistry upholds and enforces the University's policies on, plagiarism and cheating. These policies are available from International student's office. All students are advised to read these policies.
2. Absences will be treated according to the university's vice-chancellor for education policies. Due to the compact nature of practical classes, no absences is allowed in practical classes.
3. Late arrival more than 5minutes is considered absence.
4. Mobile phones, Tablets, and other electronic devices must be turned off at all times unless being used for a purpose relevant to the class. Students having a Mobile phone, tablet, or computer on their person during an exam will be assumed to have it for the purpose of cheating.
5. Any recordings of lectures may only be performed with written permission of the lecturer, and are for personal use only. The instructor retains copyright to such recordings and all lecture materials provided for the class (electronic and otherwise); these materials must not be shared or reposted on the Internet.
6. Course materials, such as notes, problem sheets, examinations, example sheets, or review sheets, may not be redistributed without the explicit written permission of the instructor.