

Introduction to the course: Practical biochemistry of the semester: the first academic year 2020-2021

School: Medicine Department: Biochemistry

- \* Course name and number: Practical biochemistry of health
- \* Field and degree: Medicine
- \* Day and time of holding: -
- \* Venue: Biochemistry group
- \* Number and type of unit (theoretical / practical): 1 practical unit
- \* Prerequisite courses: No prerequisite
- \* Name of the person in charge of the course (course instructor): Dr. Haqqani
- \* Phone and contact days: 08412235727
- \* Email address: [haghani.bio@gmail.com](mailto:haghani.bio@gmail.com)
- \* Office address: Biochemistry Department

Lesson Objective: Understanding the chemical structure and chemical reactions of vital molecules in the body

\* Specific or partial objectives of the lesson: The specific objective is better to be written behaviorally (behavioral objective has the audience, behavioral verb, degree and criteria and conditions of performance)

- 1- The student must know the laboratory equipment and safety principles of the laboratory.
- 2- The student must know the method and principles of solubilization.
- 3- The student must learn the purpose of titration and the method of work.
4. The student must identify sugars and amino acids through biochemical reactions
5. The student must know the components of blood.
- 6- The student should get acquainted with the spectrophotometer.
- 7- The student should know the method of measuring blood sugar.

\* Student duties: (Student homework during the semester)

- 1- Permanent and timely presence in the classroom
- 2- Presenting the work report from the previous session
- 3- Cooperating in conducting experiments in each session

\* Main resources of the course Main resources: (By observing the principles of source writing and giving an address for their preparation, including library, bookstore, Internet,)

1- Principles of Biochemistry Laboratory (Authors: Faculty members of Tehran University of Medical Sciences)

\* Teaching method + teaching aids used: lecture, question and answer, PowerPoint, whiteboard

\* Methods and time of assessment and evaluation of the student and the bar related to each value B:

method	score	date	time
work report	1 score	After each session	Delivery to the next meeting
The end of the semester	About 50% of the total score	Date set by expert	According to the set time

\* In case of excessive justified absence, introduction to training and removal of the lesson

Lesson rules and expectations from students:

Schedule for presenting the general biochemistry curriculum for the first semester of the academic year 2020-2021

Raw	title	time	Lecturer	Necessary preparation of students before the start of the class
1	Familiarity with laboratory equipment and safety principles in the laboratory	-	Dr. Haqqani	
2	Familiarity and work with spectrophotometers	--	Dr. Haqqani	Read the contents of the previous topics
3	Titration	-	Dr. Haqqani	Read the contents of the previous topics

4	Solubilization	-	Dr. Haqqani	Read the contents of the previous topics
5	Blood sampling and isolation of serum and plasma	--	Dr. Haqqani	Read the contents of the previous topics
6	Qualitative identification of amino acids	-	Dr. Haqqani	Read the contents of the previous topics
7	Qualitative identification of sugars	-	Dr. Haqqani	Read the contents of the previous topics
8	Blood glucose measurement using a laboratory kit		Dr. Haqqani	Read the contents of the previous topics