Module Description

Module title: Biochemical Calculations – practical part.

Module code: BCH 312

Year: 1445 H (2024) – Second semester.

Module objective:

Understanding the most common calculation in biochemistry, including ways of expressing concentration, pH calculation, ionization of weak acid, buffers and some application of spectrophotometers.

Mark distribution:

Total mark is 25:

- 5 marks for quizzes.
- 4 marks for lab report.
- 1 mark for lab performance
- 2 marks for homework
- 13 marks for final exam.

Module experiments:

No.	Experiment Title	Date
1	Identification of the common laboratory glassware, pipettes and Equipment	30 Jan
2	Preparation of Solutions	6 Feb
3	Dilution of Solutions	13 Feb
4	Preparation of Different Buffer Solutions	20 Feb
5	Preparation of Buffer Solutions by Different Laboratory Ways	5 Mar
6	Buffer Capacity	12 Mar
	Buffer calculation review	19 Mar
7	Titration of a weak acid with strong base	26 Mar
8	Titration curve of amino acids	16 Apr
9	Beer's- Lambert Law and Standard Curves	23 Apr
May 6th, 2024 (10 – 12) or May 7th, 2024 (1 – 3)		

Reference:

Segel, I. H. (1968, January 1). Biochemical Calculations. John Wiley & Sons.