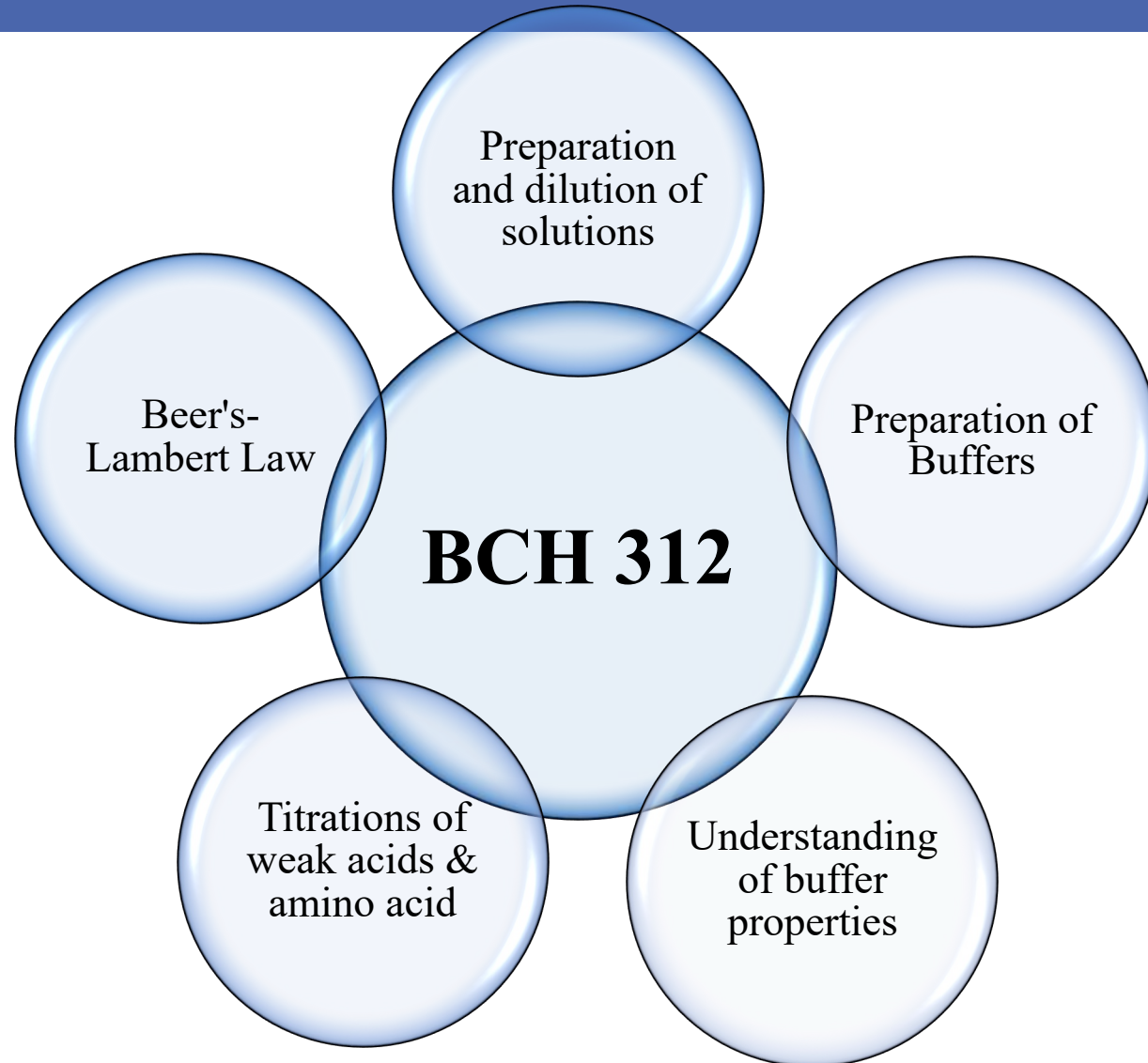


Introduction and lab safety

Mark Distribution:

Evaluation	Marks
Quizzes	5 Marks
Lab report	4 Marks
Lab performance	1 Mark
Homework	2 Marks
Final exam	13 Marks (May 6 th /7 th , 2024)
Total	25 Marks

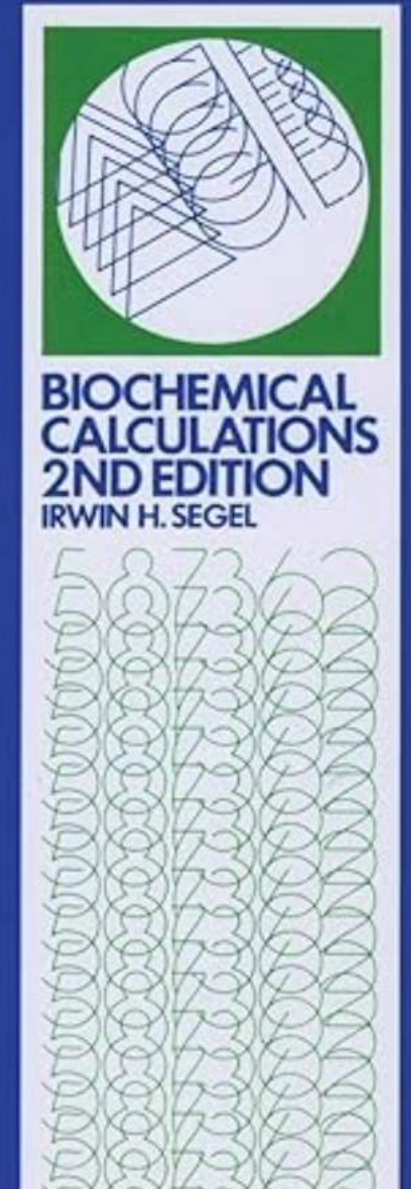
Course Outline:



Course Reference:

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

<https://www.dropbox.com/s/j3yi4k0aj9xkzko/%40biochemical%20calculation.pdf?dl=0>



Writing a Report:

⇒ 1st Writing style:

Font: Times New Roman. Size: 12 for text and 14 for subtitle. The space between line is 1.5. The text must be justified.

⇒ 2nd Report content:

1. Cover page

Logo of uni. & dep. – report title – course name and code – students names – date of submission.

2. Table of content



كلية العلوم
قسم الكيمياء الحيوية

King Saud University
College of Science
Department of Biochemistry

Title of the experiment

BCH 000

Prepared by:

Name 4411111

Name 4411111

Writing a Report:

3. Introduction

A background that helps to understand your topic should be written. The information in the introduction must be cited.

4. Objective/s

Write it using your own words, make it specific.

5. Materials and methods

As in the lab-sheet

Introduction

migration rate of RNA through agarose gels depends on the following parameters: size of the RNA molecules, the concentration of agarose gel, and voltage applied [7].

References

7.

Surzycki, S., *Basic Techniques in Molecular Biology*. 2000, New York: Springer.

Writing a Report:

6. Results

- You should report all the results that you get from your experiment. Any tables, figures or calculations.
- You MUST write the legend of tables and figures as shown below

7. Discussion

You must write a description and reasons for why you got your results.

8. References

Endnote, Mendeley or Cite This For Me: Web Citer (*extension in Google Chrome*).

Table number

↓

Table 2. Effects of Lipofundin 20% on hepatic lipid peroxidation biomarkers.

Biomarkers	Control group	Lipofundin group
MDA (µmol/L/mgPr)	3.89 ± 0.75	7.63 ± 0.31*
TH (µmol/L/mgPr)	35.27 ± 4.22	67.32 ± 5.89*
PP (µmol/L of MDA/mg Pr)	5.06 ± 0.48	9.74 ± 0.42*

Table legend

↓

Substrate	Respiration (ppm CO ₂ /min)
No sugar	~500
Glucose	~1100
Sucrose	~1100
Lactose	~800
Fructose	~950

↑

Figure number

↑

Figure legend

General Laboratory Safety

- You.
- Other lab workers and visitors.
- Your work.

General consideration:

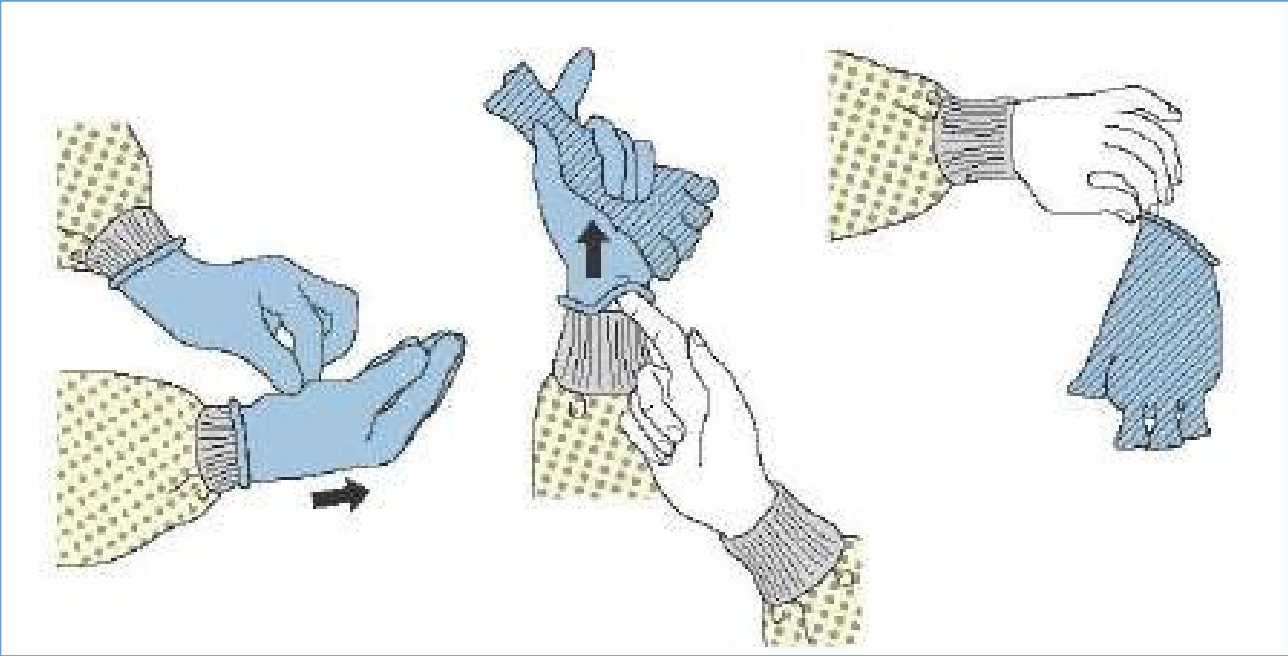
- Never **eat, drink** or chew gum in the lab.
- Do **not** taste, smell or touch any chemical.
- Tell your instructor about any accident.
- Tie your hair before experimenting.
- Closed-toed shoes should be worn at all times.
- Wash your **hands** with soap after an experiment.
- You must know all exits in your lab, eye washer, and fire extinguisher, first aid kit.
- Do **not** touch any electrical sources.



General consideration:



How to remove gloves



General consideration:

Before starting the experiment:

- Before starting working, be sure to label the glassware.
- Glassware should be cleaned before use.



After finishing the experiment:

- After finishing the experiment turn off all the equipment, and clean your work bench.
- Glassware must be cleaned and kept back in the proper place.



Dealing with chemicals

- Consider all chemicals to be hazardous.
- Know what chemicals you are using and notice the **hazard symbols**.
- Carefully **read the label** twice before taking anything from a bottle.
- **Never point** a test tube that you are heating at yourself or your neighbour.
- You must work at the **hood** when dealing with a chemical with fumes.
- If chemicals come into **contact with your skin** or eyes, **flush** immediately with water and consult with your instructor.
- Always pour acids into water. If you pour water into acid, the heat of the reaction will cause the water to explode into steam.
- Do not forget to **label your tubes** before starting the lab.
- **Close** all chemical bottles after finishing
- Dispose of chemicals properly.



Hazard symbols:

SAFETY PRACTICES



Flammable



Harmful /
Irritant



Corrosive



Poison /
Toxic



Explosion



Biohazard



Oxidizer



Environmental
Hazard



Radioactive