



GENERAL CHEMISTRY

BEY 147E & BEY 105E

Course Outline

By:

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Objectives

It's aimed to gain knowledge about:

- ❖ Properties of matter,
- ❖ Atomic, chemical compounds,
- ❖ Chemical reactions,
- ❖ Aqueous solutions,
- ❖ Gases and simple gas laws,
- ❖ Atomic electronic structure,
- ❖ Periodic table,
- ❖ Chemical bonds,
- ❖ Thermochemistry,
- ❖ Chemical kinetics and equilibrium,
- ❖ Acids and bases,
- ❖ Solutions.



Outcomes

By the end of this semester, you will be able to:

- ❖ Collect information about substance atoms, chemical compounds, chemical bonds, chemical reactions, thermodynamics.
- ❖ Calculate acid-base, pH, aqueous solutions.
- ❖ Solve questions of gas laws and principles of chemistry.



Course Assessment

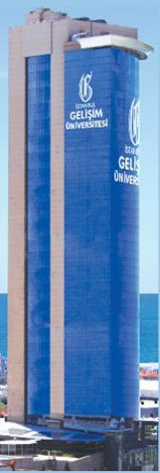
| Assessment & Grading of In-Term Activities | Number of Activities | Degree of Contribution (%) |
|--|----------------------|----------------------------|
| Mid-Term Exam | 1 | 30 |
| Activities | | 20 |
| Final Exam | 1 | 50 |
| TOTAL | 2 | 100 |

Activities involve quizzes, homework, report,.....



WEEKLY COURSE CONTENTS

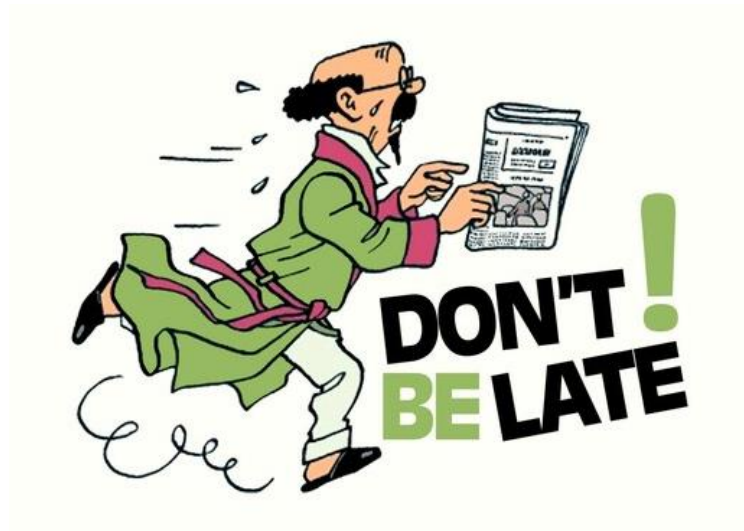
| Week | Topics (Subjects) |
|------|---|
| 1 | Structure and Properties of Material |
| 2 | Atom, Compound, Electron Sequences |
| 3 | Quantum Numbers, Modern Atomic Theory |
| 4 | Periodic Table and Properties |
| 5 | Classification and Nomenclature of Chemical Compounds |
| 6 | Types of Chemical Reactions, Calculations |
| 7 | The Mole Concept |
| 8 | Solutions, Resolution |
| 9 | MID-TERM EXAM |
| 10 | Gas Laws |
| 11 | Chemical Kinetics |
| 12 | Chemical Equilibrium Reactions |
| 13 | Thermochemistry |
| 14 | Acids, Bases, Salts and pH Concept |
| 15 | Electrochemistry |
| 16 | FINAL EXAM |



Notes

Attendance

Attendance is mandatory for all scheduled lectures.



Because of Corona virus the lectures will be held online and uploaded to LMS.



SOURCE MATERIALS & RECOMMENDED READING

General Chemistry: Principles and Modern Applications

by Ralph H. Petrucci, F. Geoffrey Herring, Jeffry D. Madura, Carey Bissonnette

Introduction to chemistry for biology students

Sackheim, George I.
2002, 7th Edition

Lecture Notes



Office Hours

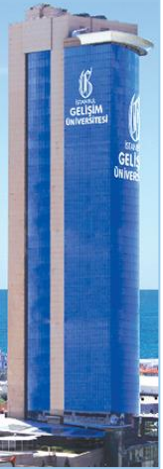
Block A

5th Floor

Office: 505

Email: iaeismail@gelisim.edu.tr

Time: Let me know before your coming



Thank you

