

# COURSE CURRICULUM MAP Chemistry I – Semester A

1–4Weeks

5-9Weeks

10-13 Weeks

14-18 Weeks

## Content/ Concepts

- Intro to Chemistry (history)
- Scientific method
- States of Matter
- Metric system
- **Chap 1,2**

- Problem solving
- Measurements
- Dimensional Analysis
- **Chap 3**

- Atomic structure
- Orbitals
- Periodic Law
- **Chap 4-6**

- Nomenclature
- Polyatomic ions
- Oxidation numbers
- **Chap 7-9**

## Skills

- Knowing relevancy of chemistry to society
- Understand & use science method
- Understand & explain states of matter
- Be able to manipulate metric/standard calculatory

- Be able to solve numerical & word problems with proficiency
- Demonstrate correct methodology for measuring a substance
- Accurately structure problems utilizing dimensional analysis

- Understand & identify proton, neutron & electron behaviors & interactions
- Describe structure of an atom
- Identify elements from their atomic number
- Identify & distinguish isotopes
- Identify elements from group & period positions in the periodic table

- Relate chemical bond formation to electron configuration
- Describe the formation of polyatomic ions
- Write formulas for ionic compounds
- Name ionic compounds
- Apply the octet rule to atoms that bond covalently.
- Identify the binary molecular compounds from their formulas.
- Name binary molecular cpds.

## **Labs**

- Basic Procedures
- equipment
- Chemical Change
- Analysis Galvanized Iron
- Flame Test Metal
- Metallurgy
- Formula Copper Chloride
- Transition Metal Cpd. Rxn.