

Department of Chemistry

Course Outcomes

I Semester /Chemistry Core Course - 1

(Inorganic & Physical Chemistry)

On successful completion of this course, the students will be able to:

- Understand the basic concepts of p-block elements
- Explain the difference between solid, liquid and gases in terms of intermolecular interactions.
- Apply the concepts of gas equations, pH and electrolytes while studying other chemistry courses

II Semester /Chemistry Core Course – 2

(Organic & General Chemistry)

On successful completion of this course, the students will be able to:

- Understand and explain the differential behavior of organic compounds based on fundamental concepts learnt.
- Formulate the mechanism of organic reactions by recalling and correlating the fundamental properties of the reactants involved.
- Learn and identify many organic reaction mechanisms including Free Radical Substitution, Electrophilic addition and Electrophilic Aromatic Substitution.
- Correlate and describe the stereochemical properties of organic compounds and reactions.

III Semester /Chemistry Core Course - 3

ORGANIC CHEMISTRY & SPECTROSCOPY

On successful completion of this course, the students will be able to;

- Understand preparation, properties and reactions of haloalkanes, haloarenes and oxygen containing functional groups.
- Use the synthetic chemistry learnt in this course to do functional group transformations.
- 3. To propose possible mechanisms for any relevant reaction

IV Semester/ Chemistry Core Course – 4 INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY

On successful completion of this course, the students will be able to;

- To learn about the laws of absorption of light energy by molecules and the subsequent photochemical reactions.
- To understand the concept of quantum efficiency and mechanisms of photochemical reactions.

IV Semester / Chemistry Core Course –5 INORGANIC & PHYSICAL CHEMISTRY

On successful completion of this course, the students will be able to:

- Understand concepts of boundary conditions and quantization, probability distribution, most probable values, uncertainty and expectation values
- Application of quantization to spectroscopy.
- Various types of spectral and the instrumental determination.

Project work

- Skill in operating laboratory equipment, their upkeep, and adept at various biological techniques.
- Develop Ability to prepare solutions and prepare different dilutions.
- Interpreting scientific results, and ability to present results in a scientific way through graphs, photographs, poster presentations
- Develop ICT skills and Power point presentations.
- Develop the art of scientific writing and presentation of scientific matter. Scientific writing and ethics. Writing references