

## **AIMS AND OBJECTIVES OF CHEMISTRY SYLLABUS**

### **AIMS**

The broad aims of this syllabus are that the students should be able to:

1. develop an interest in chemistry;
2. seek knowledge and enjoyment from the subject of chemistry;
3. develop an ability to think scientifically;
4. acquire an ability to perform experiment;
5. acquire an ability to solve problems;
6. observe accurately and objectively;
7. develop an awareness of the social, economical and technological implication of chemistry.

### **GENERAL OBJECTIVES**

The general objectives of Chemistry syllabus are to:

1. enable learners to develop understanding science process skill and scientific attitude to appreciate chemistry as a changing and growing human activity;
2. be able to apply the knowledge and principles learned in explaining phenomena or solving problems related to chemistry;
3. enable learners to formulate opinions in solving community problems especially related to environment;
4. provide opportunities to understand social and economic issues related to chemistry;
5. prepare the students to adopt careers in chemistry based field of science and technology;
6. prepare the students for studies beyond higher secondary level;
7. develop imaginative and critical thinking;
8. develop self nutrition and the ability to work in a sustained fashion;
9. recognize the usefulness and limitations of scientific method and to appreciate the interrelationship between different disciplines.

## SPECIFIC OBJECTIVES

The syllabus content is based on the following specific objectives:

### A. Knowledge, understanding and applications

Students should be able to:

1. understand certain useful facts, laws, principles, theories and concepts in chemistry;
2. communicate using an adequate chemistry vocabulary;
3. apply the knowledge and principles learned in explaining physical phenomena or solving problems related to chemistry;
4. understand the relevant applications of chemistry in society and in every day life;
5. use generalization and models to make predictions.

### B. Practical Skills

Students should be able to:

1. follow sequence of instruction, learn techniques and safe handling of apparatus and chemicals;
2. observe and record experimental observations accurately;
3. interpret and evaluate observations and experimental data;
4. manipulate numerical and other data;
5. select appropriate apparatus to design experiments;
6. analyze and evaluate chemical information of a qualitative and quantitative nature and draw valid conclusions.

### C. Attitudes

Students should be able to:

1. develop curiosity and interest in making scientific investigations;
2. accept that theories and models have both usefulness and limitations in making predictions and describing physical phenomena;
3. develop personal integrity through objective observations and honest recording of experimental data;
4. cooperate with others in scientific inquiry;
5. show awareness of the moral, economic, political and social consequences of the applications of chemistry to meet human needs;
6. develop attitudes relevant to science such as inquiry and inventiveness.