

CHANDIDAS MAHA VIDYALAYA

DEPARTMENT OF CHEMISTRY

A Govt. Aided Degree College Affiliated to the University of Burdwan.
UGC Accredited under section 2(f) & 12(B) [1979] * NAAC Accredited in 2016
KHUJUTIPARA , Dist – BIRBHUM , WEST BENGAL, INDIA – 731215
www.chandidasmahavidyalaya.ac.in cmahavidyalaya1972@gmail.com

9474614644



8116010647

Ref.No:

Date:

COURSE OUTCOME

SEMESTER -1

Course Code	Outcome
CHEM1011 Major	Students will be introduced with several basic aspects of theory and practical of chemical sciences. This will grow the foundation of the subject for studying various advanced topics in future semesters. Several fundamental aspects of inorganic, organic and physical chemistry is discussed for the basic understanding of the students. The topics covered will help the students for studying higher in chemical sciences. Easy organic chemistry practical using several chemical and physical methods will enhance the basic knowledge of students' hands-on training.
CHEM1021 Minor	On studying the course, the students will have an idea of chemical sciences, which may be applied for in-depth study of other science streams. Several fundamental aspects of the subject are discussed so that the principles can be useful for studying other branches of science (physical and/or biological sciences). Practical experiments are designed in such a way that the students of other disciplines can have an experience of hands-on training in chemistry at the primary level.
CHEM1031 Multidisciplinary	After studying the topics these may help the students to get employment. Several topics related to everyday life have been included to grow interest among students for the subject.
CHEM1051 SEC	The clear idea about the drugs may not only grow the general sense about the synthesis and mode of action of the drugs but also help them to have employment in pharmaceutical industry. Students will be able to design and development of several organic drugs. The very detail discussion for growing of very clear idea about the drugs, their synthesis and physiological action.

SEMESTER -2

Course Code	Outcome
CHEM2011 Major	The topics will grow the foundation of the students for the subject chemistry for learning any further advanced topics. Several basic topics from inorganic, organic and physical chemistry have been chosen for the development of the general chemistry knowledge of the students. This will help to grow the foundation for studying the several aspects of applied chemistry in future.
CHEM2021 Minor	The idea created from this course may help to understand students for further studying physical, biological and material sciences. Several basic aspects from inorganic, organic and physical chemistry have been discussed. Generation of idea for studying physical and biological sciences in future.
CHEM2031 Multidisciplinary	Development of idea of several molecules and materials related to dye and cosmetics industry. Introduction of idea of every day products of chemical industries.
CHEM2051 SEC	This course will develop the analysis as well as separation skills of the students which may help them to motivate for joining research and/or have employment. Development of skill for analyzing several natural and synthetic samples to find out their purity, composition, etc. Development of skill for advanced separation techniques for natural and synthetic samples.

SEMESTER-3

Course Code	Outcome
CHEM3011 Major	After studying several basic aspects of chemistry, students will go through their applications in studying coordination chemistry, s- and p-block elements. On studying different comparative properties s- and p-block elements, proper chemical logic will start to be developed among the students. Discussion of bonding theories (advanced parts) will give students to more clear idea. Application of the basic theories discussed so far towards coordination chemistry and s- and p-block elements.
CHEM3012 Major	Towards qualitative detection of several radicals, different experiments have to be covered. These will actually grow a clear knowledge and conception in chemistry. Moreover, preparation of modern coordination compounds will create an insight to the synthetic coordination chemistry.
CHEM3031 Multidisciplinary	Exploring the knowledge of fundamental chemistry towards soil, fertilizer, detergent will not only create general chemical knowledge of the students but also will generate the possibility of employability. Students will develop knowledge of soil, knowledge of fertilizer, idea of pesticide, idea of development of several surface-active agents like soap, etc.
CHEM3051 SEC	The course will help the students sound for doing several chemical computations. They will be able to develop mathematical knowledge and knowledge for computer programming, knowledge for different data handling softwares.

SEMESTER-4

Course Code	Outcome
CHEM4011 Major	The course will help the students to develop a complete knowledge on stereochemistry, reaction mechanism and others of organic chemistry. Development of knowledge for several basic and advanced topics of organic chemistry will be very much effective for students.
CHEM4012 Major	The course will help to develop physical chemistry knowledge of solid, liquid and gaseous states of matter. Students will also learn to do quantum chemical calculations for various systems. Development of knowledge of theories of several experimental and theoretical aspects of chemistry is additional benefit for students.
CHEM4013 Major	Students will have a hands-on training for detection of elements (N, S, Cl, Br, etc) and synthesis/derivatization of several organic compounds. Along with this, they will be able to detect several elements in organic molecules ,functional group in organic molecules, organic preparations etc.
CHEM4021 Minor	This course will help the students to develop advanced topics of chemistry, physics and biology. Students will learn to synthesize several coordination compounds. Students will also learn to estimate hardness of water by chemical analysis and several general aspects of inorganic, organic and physical chemistry.

SEMESTER-5

Course Code	Outcome
CHEM5011 Major	The course will help the students to develop a complete knowledge on radioactivity, coordination chemistry, transition elements, inorganic polymers as well as practical concept on chromatographic separation technique, gravimetric and spectrophotometric estimation, development of knowledge for several basic and advanced topics of inorganic chemistry.
CHEM5012 Major	The course will help the students to develop a complete knowledge on pericyclic reactions, retrosynthesis, polynuclear hydrocarbons and study of biomolecules as well as practical concept of volumetric estimation and chromatographic separation of organic sample, development of knowledge for several basic and advanced topics of organic chemistry.
CHEM5013 Major	The course will help the students to develop a complete knowledge on crystal structure, polymers, dipole moment, polarizability, applications of quantum mechanics, statistical thermodynamics and surface phenomena, development of theoretical and practical knowledge for several basic and advanced topics of physical chemistry.

SEMESTER-6

Course Code	Outcome
CHEM6011 Major	The course will help the students to develop a complete knowledge on metallurgy, lanthanides & actinides, bio-inorganic chemistry, organometallic chemistry as well as reaction kinetics & mechanism and also development of knowledge for several basic and advanced topics of inorganic chemistry.
CHEM6012 Major	The course will help the students to develop a complete knowledge on organic spectroscopy, cyclic stereochemistry, heterocyclic chemistry as well as introductory concept on green chemistry, knowledge for several basic and advanced topics of organic chemistry.
CHEM6013 Major	The course will help the students to develop a complete knowledge on thermodynamic applications, electrical properties of molecules, molecular spectroscopy and photochemistry, knowledge for several basic and advanced topics of physical chemistry.
