

Swarnamoyee Jogendranath Mahavidyalaya

At+P.O.: Amdabad, P.S.: Nandigram, Dist.: Purba Medinipur, PIN 721650

DEPARTMENT OF ZOOLOGY

COURSE OUTCOMES OF GENERAL COURSES UNDER CBCS w.e.f. 2018-19

DSC-1A (CC-1): Animal diversity

6 credits

- The course introduces students to taxonomic rules of animal classification.
- Students will learn about different types of invertebrate animals, including protozoa to Echinodermata and some special features, locomotory organelles and life history.
- Students will learn to identify non-chordates from their special features.
- Students will learn about phylum Protochordate to Mammalia.
- The course will enhance students' knowledge of vertebrates and their adaptation.

DSC-1B (CC-2): Comparative Anatomy and Developmental biology of vertebrates

6 credits

- The course will enrich students' comparative knowledge of the integumentary, skeletal, digestive, circulatory, urogenital, and nervous systems of various classes of vertebrates.
- Students will learn about basic concepts of developmental biology.
- Students will learn about fertilization, cleavage, fate map and morphogenetic movement.

DSC-1C (CC-3): Physiology and Biochemistry

6 credits

- Students will gain a basic knowledge about muscle contraction.
- Students will learn about the process of digestion and respiration.
- Students will learn about kidney structure, heart structure and function of endocrine glands and formation of gametes.

- Students will gain a basic knowledge about carbohydrate, protein, lipid metabolism.

DSC-1D (CC-4): Genetics and evolutionary biology

6 credits

- Students will learn the concepts of Mendelian genetics and its extension, linkage, crossing over, mutations.
- Students will gain a basic knowledge about sex determination, history of life.
- Students will be introduced to Lamarckism, Darwinism and Neo-Darwinism.
- Student will learn about the species concept
- Students will gain a basic knowledge about variations, isolating mechanism, natural selection, macro evolution and extinction.

DSE-1: Immunology

6 credits

- Students will gain a basic knowledge about the immune system, immune organs and types of immunity.
- Students will be introduced to the basic structure of antibody and types of antibody.
- Students will learn about the antigen antibody interactions and T & B lymphocytes, haptens, adjuvant and MHC.
- Students will learn about various types of vaccines.

DSE-2: Animal Biotechnology

6 credits

- Students will be introduced to the concept and scope of biotechnology.
- Students will gain a basic knowledge about Southern, Northern, Western blotting and DNA – finger printing.
- Students will be introduced to animal cell culture.
- Students will be introduced to recombinant DNA technology and molecular diagnosis of genetic disease.

SEC-1: Apiculture**2 credits**

- Students will gain a basic knowledge about biology of honey bees, bee rearing, bee keeping equipment and bee –hives.
- Students will learn about bee disease and enemies, control and preventives measures.
- Students will gain a basic knowledge about bee economy and entrepreneurship in apiculture.

SEC-2: Sericulture**2 credits**

- This course introduces students to the biology of silk worm, and the rearing of silk worms.
- Students will learn about silk worms, disease and pathogenesis of silk worm.
- Students will gain a basic knowledge about sericulture economy and entrepreneurship in sericulture.

