Learning Outcomes: PO PSO CO Mapping

Department of Biochemistry
Gurudas College

Learning Outcomes

Program Outcomes

PO1: Demonstrate thorough and in-depth knowledge of at least one discipline in the sciences, by applying discipline-specific expertise and problem-solving skills to resolve

PO2: Display a thorough understanding of the scientific method, including :

* the application of the scientific method in solving problems, leading investigations and conducting scientifically-driven analysis

* undertaking data analysis using qualitative and quantitative methods

PO3: Represent a commitment to the development of a scientific temper communicating the virtues of rational thinking and the scientific method

PO4: Develop an innovative model of thought and serve as a bridge between academia and industry-linked R &D

PO5: Perform tasks with impeccable professional ethics,

PO6: Illustrate a commitment to inter-disciplinary thinking and innovation.

Program Specific Outcomes

Upon successful completion of the undergraduate program in Biochemistry Hons, a student will be able to

PSO1: Demonstrate a clear understanding of biomolecules in life and achieve in depth knowledge about their structure and functions

PSO2: Relate their basic organic chemistry knowledge with biomolecules

PSO3: Analyze biomolecules and organic molecules in systematic methods

PSO4: Justify laws of thermodynamics in light of biochemical reactions

PSO5: Illustrate state-of-art physical as well as biochemical methods in daily life.

PSO6: Analyze, evaluate and criticize biochemical problems in living systems with the help of in depth scientific knowledge, with current knowledge of research works in this field.

Biochemistry Honours : Mapping PO and PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
PO1						
PO2						
PO3						
PO4						
PO5						
PO6						

Structure of B.Sc. (Hons) Biochemistry syllabus under CBCS
University of Calcutta
Effective from 2018-19

Semester Core Course Course Code
I CC-1: Molecules of Life BCM-A-CC-1-1
I CC-2: General Organic Chemistry BCM-A-CC-1-2
II CC-3: General Physical Chemistry BCM-A-CC-2-3
II CC-4: Enzymes BCM-A-CC-2-4
III CC-5: Bio-physical Chemistry BCM-A-CC-3-5
III CC-6: Metabolism of Carbohydrates and Lipids BCM-A-CC-3-6
III CC-7: Cell Biology BCM-A-CC-3-7
IV CC-8: Membrane Biology and Bioenergetics BCM-A-CC-4-8
IV CC-9: Metabolism of Amino Acids and Nucleotides BCM-A-CC-4-9
IV CC-10: Basic Microbiology and Microbial Genetics BCM-A-CC-4-10
V CC-11: Gene, Gene Expression and Regulation BCM-A-CC-5-11
V CC-12: Physiology and Hormones BCM-A-CC-5-12
VI CC-13: Genetic Engineering and Biotechnology BCM-A-CC-6-13
VI CC-14: Immunology BCM-A-CC-6-14

Discipline Specific Elective (*Any four*)

DSE-A

[Any one (A1 or A2) to be chosen for Semester 5]
DSE A1: Nutritional Biochemistry
DSE A2: Molecular basis of infectious human diseases
[Any one (A3 or A4) to be chosen for Semester 6]
DSE A3: Advanced Cell Biology
DSE A4: Molecular basis of non-infectious human diseases

DSE-B

[Any one (B1 or B2) to be chosen for Semester 5]
DSE B1: Advanced Biochemistry
DSE B2: Plant Biochemistry
[Any one (B3 or B4) to be chosen for Semester 6]
DSE B3: Molecular diagnostics
DSE B4: Research Methodology

Skill Enhancement Elective Course (*Any two; one in Semester III & one in Semester IV*)

Semester III
(Any one to be chosen)
SEC A: Tools and Techniques in Biochemistry
SEC A: Protein Purification Techniques

Semester IV
(Any one to be chosen)
SEC B: Clinical Biochemistry
SEC B: Recombinant DNA Technology

Biochemistry Honours : CO PSO Mapping

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CC1						
CC2						
CC3						
CC4						
CC5						
CC6						
CC7						
CC8						
CC9						
CC10						
CC11						
CC12						
CC13						
CC14						
DSEA2						
DSEA3						
DSEB1						
DSEB3						
SECA						
SECB						