ST. STEPHEN'S COLLEGE UZHAVOOR

(Affiliated To Mahatma Gandhi University, Kottayam)



PROGRAMME OUTCOMES

UZHAVOOR P. O, KOTTAYAM, KERALA – 686 634 Email:<u>info@ststephens.net.in</u> Website: www.ststephens.net.in

Graduate Programme Outcomes – BSc/BCom/BA

Graduate Programmes offered by Mahatma University is Outcome-based, and the expected outcomes are as follows

PO1	Domain Knowledge: Enhancing the horizon of knowledge so as to enable the learners to pursue academic or professional careers.
PO2	Ideal Citizenship: Demonstrate empathetic social concern and equity-centered development as a responsible citizen, and the ability to act with an informed awareness of issues as well as participate in civic life through volunteering.
PO3	Engage in life long learning: Recognise the need and have the preparation and ability to engage in independent and life long learning in the context of an ever-changing world.
PO4	Social Interaction: Become competent, committed, conscious, creative and compassionate citizens, for and with others.
PO5	Ethics: Intercultural and ethical competency, visible through a readiness to serve humanity.
PO6	Global Competence: Integrates the knowledge of the world, and the skill of application, with the disposition to think and behave on a global stage.
PO7	Effective Communication: Develop effective communication skills and the ability to work in teams.
PO8	Environment Consciousness and Sustainability: Develop in the students an attitude of reconciliation between humans and nature which will help them become peacemakers, defenders of the poor and helpers of the environment.
PO9	Digital Competence: Ability to use techniques, skills and modern information technology tools at their study and work place.

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PROGRAMME SPECIFIC OUTCOMES B Sc Zoology

UZHAVOOR P. O, KOTTAYAM, KERALA – 686 634 Email:<u>info@ststephens.net.in</u> Website: www.ststephens.net.in Bachelor of Science in Zoology Programmes offered by Mahatma University is Outcome-based, and the expected PSOs are as follows

PSO1	Acquire basic knowledge of various disciplines of Zoology and General Biology meant both for a graduate terminal course and for higher studies.
PSO2	Inculcate interest in nature and love of nature.
PSO3	Understand the rich diversity of organisms and their ecological and evolutionary significance
PSO4	Imbibe basic skills in the observation and study of nature, biological techniques, experimental skills and scientific investigation
PSO5	Create awareness on the internal harmony of different body systems and the need for maintaining good health through appropriate lifestyle
PSO6	Acquire basic knowledge and skills in certain applied branches for self-employment
PSO7	Impart awareness of the conservation of the biosphere.

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COURSE OUTCOMES

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Course Outcomes

SEMESTER 1. ZY1CRT0I. CORE COURSE 1.

GENERAL PERSPECTIVES IN SCIENCE & PROTISTAN DIVERSITY

Objectives & outcomes:

- 1. To create an awareness on the basic philosophy of science, concepts and scope
- 2. To understand different levels of biological diversity through the systematic classification
- 3. To familiarize taxa level identification of animals
- 4. To make interest in Protistan diversity
- 5. To impart knowledge on parasitic forms of lower invertebrates.

SEMESTER 2. ZY2CRT02, CORE COURSE 2.

ANIMAL DIVERSITY - NON CHORDATA

Objectives & outcomes:

- 1. To create appreciation on diversity of life on earth
- 2. To understand different levels of biological diversity through the systematic classification of invertebrate fauna
- 3. To familiarize taxa level identification of animals
- 4. To understand the evolutionary significance of invertebrate fauna
- 5. To instill curiosity on invertebrates around us
- 6. To impart knowledge on parasitic forms of lower invertebrates.

SEMESTER 3. ZY3CRT03, CORE COURSE 3

ANIMAL DIVERSITY – CHORDATA

Objectives & outcomes:

- 1. To acquire in depth knowledge on the diversity of chordates and their systematic position.
- 2. To make them aware of the economic importance of some classes.
- 3. To understand the evolutionary importance of selected chordate groups

SEMESTER 4. ZY4CRT04 CORE COURSE 4

RESEARCH METHODOLOGY, BIOPHYSICS AND BIOSTATISTICS

Objectives & outcomes:

- 1. To familiarise the learner the basic concept of scientific method in research process.
- 2. To have a knowledge on various research designs.

- 3. To develop skill in research communication and scientific documentation.
- 4. To create awareness about the laws and ethical values in biology.
- 5. To equip the students with the basic techniques of animal rearing collection and preservation
- 6. To help the student to apply statistical methods in biological studies.

SEMESTER 5. ZY5CRT05 CORE COURSE 5

ENVIRONMENTAL BIOLOGY AND HUMAN RIGHTS

Objectives & outcomes:

- 1. To instill the basic concepts of Environmental Sciences, Ecosystems, Natural Resources, Population, Environment and Society
- 2. To make the students aware of natural resources, their protection, conservation, the factors polluting the environment, their impacts and control measures.
- 3. To teach the basic concepts of toxicology, their impact on human health and remedial measures
- 4. To create a consciousness regarding Biodiversity, environmental issues& conservation strategies
- 5. To develop the real sense of Human rights its concepts & manifestations

SEMESTER 5. ZY5CRT06 CORE COURSE 6

CELL BIOLOGY AND GENETICS

Objectives & outcomes:

- 1. To understand the structure and function of the cell as the fundamentals for understanding the functioning of all living organisms.
- 2. To make aware of different cell organelles, their structure and role in living organisms.
- 3. To develop critical thinking, skill and research aptitudes in basic and applied biology
- 4. To emphasize the central role of genes and their inheritance in the life of all organisms.

SEMESTER 5. ZY5CRT07 CORE COURSE - 7

EVOLUTION, ETHOLOGY & ZOOGEOGRAPHY

Objectives & outcomes:

- 1. To acquire knowledge about the evolutionary history of earth living and nonliving.
- 2. To acquire basic understanding about evolutionary concepts and theories.
- 3. To study the distribution of animals on earth, its pattern, evolution and causative factors.
- 4. To impart basic knowledge on animal behavioural patterns and their role.

SEMESTER 5. ZY5CRT08 CORE COURSE 8

HUMAN PHYSIOLOGY, BIOCHEMISTRY, AND ENDOCRINOLOGY

Objectives & outcomes:

- 1. This course will provide students with a deep knowledge in biochemistry, physiology and endocrinology.
- 2. Defining and explaining the basic principles of biochemistry useful for biological studies for illustrating different kinds of food, their structure, function and metabolism.
- 3. Explaining various aspects of physiological activities of animals with special reference to humans.
- 4. Students will acquire a broad understanding of the hormonal regulation of physiological processes in invertebrates and vertebrates.
- 5. By the end of the course, students should be familiar with hormonal regulation of physiological systems in several invertebrate and vertebrate systems.
- 6. This also will provide a basic understanding of the experimental methods and designs that can be used for further study and research

SEMESTER 6. ZY6CRT09 CORE COURSE 9

DEVELOPMENTAL BIOLOGY

Objectives & outcomes:

- 1. To achieve a basic understanding of the experimental methods and designs that can be used for future studies and research.
- 2. To provide the students with the periodic class discussions of current events in science which will benefit them in their future studies in the biological/physiological sciences and health-related fields
- 3. To contribute to critical societal goal of a scientifically literate citizenry

SEMESTER 6. ZY6CRT10 CORE COURSE 10.

MICROBIOLOGY AND IMMUNOLOGY

Objectives & outcomes:

- 1. To inculcate a general awareness regarding the role of micro-organisms in maintaining health.
- 2. This also will provide a basic understanding of the experimental methods and designs used in microbiology.

SEMESTER 6. ZY6CRT11 CORE COURSE 11.

BIOTECHNOLOGY, BIOINFORMATICS AND MOLECULAR BIOLOGY

Objectives & outcomes:

- 1. To provide an understanding about the latest techniques in molecular biology and bioinformatics
- 2. To emphasize the role of computers in the study of modern biology
- 3. To study various techniques used to manipulate genes and genomes

SEMESTER 6. ZY6CRT12 CORE COURSE 12

OCCUPATIONAL ZOOLOGY (APICULTURE, VERMICULTURE, QUAIL FARMING & AQUACULTURE) Objectives & outcomes:

- 1. To equip the students with self employment capabilities.
- 2. To provide scientific knowledge of profitable farming.
- 3. To make the students aware of cottage industries

OPEN COURSE (FOR OTHER STREAMS) ZY5OPT02

PUBLIC HEALTH AND NUTRITION

Objectives & outcomes:

- 1. To inculcate a general awareness among the students regarding the real sense of health.
- 2. To understand the role of balanced diet in maintaining health.
- 3. To motivate them to practice yoga and meditation in day-to-day life.

ELECTIVE COURSE. ZY6CBT04

NUTRITION, HEALTH AND LIFESTYLE MANAGEMENT

Objectives& outcomes:

- 1. To provide students with a general concept of health and the parameters that define health and wellness.
- 2. To understand principles of nutrition and its role in health.
- 3. To familiarize the students regarding food safety, food laws & regulations.
- 4. To provide knowledge and understanding regarding life style diseases.
- 5. To promote an understanding of the value of good life style practices, physical fitness and healthy food habits for life style disease management