

DEPARTMENTOF MATHEMATICS

BSc. Mathematics

Programme Specific Outcomes (PSO's)

PSO 1: Acquire basic subject knowledge in functional areas of Mathematics and apply in all the fields of learning.

PSO 2: Equip the student with skills to analyze problems, formulate a hypothesis, evaluate and validate results, and draw reasonable conclusions thereof.

PSO 3: Employ mathematical ideas encompassing logical reasoning, analytical, numerical ability, and theoretical skills to model real-world problems and solve them.

PSO 4: Develop critical thinking, creative thinking, self-confidence for eventual success in career..

PSO 5: Analyze, interpret solutions and to enhance their Entrepreneurial skills, Managerial skill and leadership.

PSO 6: Recognize the need for lifelong learning and demonstrate the ability to explore some mathematical content independently.

PSO 7: To prepare the students to communicate mathematical ideas effectively and develop their ability to collaborate both intellectually and creatively in diverse contexts.

PSO 8: Imbibe effective scientific and/or technical communication in both oral and writing.

PSO 9: Continue to acquire relevant knowledge and skills appropriate to professional activities and demonstrate highest standards of ethical issues in mathematical sciences.



BISHOP MOORE COLLEGE

MAVELIKARA

DEPARTMENTOF CHEMISTRY

MSc. Analytical Chemistry

Programme Specific Outcomes (PSO's)

- 1. Develop a better understanding of the current chemical principles, methods and theories with the ability to critically analyse at an advanced level.
- 2. Acquire solid knowledge of classical and modern experimental techniques and interpretation of results; thereby acquire the ability to plan and carry out independent projects.
- 3. Develop the qualities of time management and organization, planning and executing experiments.
- 4. Have a good level of awareness of the problems associated with health, safety and environment.
- 5. Understand how chemistry relates to the real world and be able to communicate their understanding of chemical principles to a lay audience and as well apply the knowledge when situation warrants.
- 6. Learn to search scientific literature and databases, extract and retrieve the required information and apply it in an appropriate manner.
- 7. Demonstrate proficiency in undertaking individual and/or team-based laboratory investigations using appropriate apparatus and safe laboratory practices.
- 8. Develop analytical solutions to a variety of chemical problems identified from application contexts; critically analyse and interpret qualitative & quantitative chemical information's.
- 9. Set the scene to make use of the wide range of career options open to chemistry graduates.



DEPARTMENTOF CHEMISTRY

BSc. Chemistry

Programme Specific Outcomes (PSO's)

- 1. Develop scientific outlook scientific attitude and scientific temper
- 2. Develop skill in experimenting, analyzing and interpreting data
- 3. Develop research attitude and adopt scientific method of identifying, analyzing and solving research problems in an innovative way
- 4. Apply physical and mathematical theories and principles in the context of chemical science
- 5. Use chemistry related soft wares for drawing structure and plotting graphs
- 6. Use instruments- potentiometer, conductometer, pH meter and colorimeter.
- 7. Acquire skill in safe handling of chemicals including hazardous materials.
- 8. Identify the ingredients in household chemicals, use them in a critical way
- 9. Predict analytical procedures, compare experimental, theoretical and graphical methods of analysis
- 10. Predict reaction mechanism in organic reactions
- 11. Understand the terms, concepts, methods, principles and experimental techniques of physical, organic, inorganic and analytical chemistry
- 12. Develop critical thinking and adopt healthier attitudes towards individual, community and culture through the course of Chemistry
- 13. Become cautious about environmental aspects and impact of chemicals in soil, water and air and adopt eco-friendly approach in all frontiers of life
- 14. Become responsible in consumption of natural resources and adopt measures for sustainable development.
- 15. Visit Chemical factories and industries with scientific curiosity
- 16. Develop writing skills and presentation skills using audio visual aids



MAVELIKARA DEPARTMENTOF COMMERCE B.Com Finance & Computer Application Programme Specific Outcomes (PSO's)

PSO 1: Application of the systems of accounting of various business areas.

PSO 2: Absolute comprehension of the business environment, market and ethical practices and the functioning of the various business organisations.

PSO 3: Decipher the legal framework influencing business decisions and computation of tax liability.

PSO 4: Understand the emerging issues of environment and the importance of environment protection.

PSO 5: Comprehensive perspective of the different dimensions of management in business and insight into the commencement of new ventures.

PSO 6: Efficient and effective utilisation of computer technology.

PSO 7: Accurate employment of tools, methods and techniques to analyse quantitative data for practical decision making.

PSO 8: Appraise the precision of the accounts and accounting procedure.



MAVELIKARA DEPARTMENTOF ZOOLOGY

BSc. Zoology

Programme Specific Outcomes (PSO's)

PSO1: Understand Animal diversity through the Taxonomy, Systematic classification and their relative role in the sustainability of the environment.

PSO 2: Understand the nature and fundamental concepts in Physiology, Biochemistry,Immunology, Microbiology, Genetics, Biotechnology, Cell and Molecular biology,Bioinformatics, Embryology, Ethology, Ecology, Evolution and Zoogeography.

PSO 3: Perform laboratory procedures in the areas of Cell Biology, Physiology, Biochemistry,

Molecular Biology, Immunology, Microbiology, Ecology, Ethology, Developmental Biology and Biostatistics.

PSO 4: Implement the techniques of biological sciences in Aquaculture, Sericulture, Apiculture, Poultry, Dairying and Vermiculture for the economic prosperity of the country.



BISHOP MOORE COLLEGE

MAVELIKARA

DEPARTMENTOF PHYSICS

BSc. Physics

Programme Specific Outcomes (PSO's)

PSO 1: Conceptual understanding of Physics and its practical applications and scope in the present world.

PSO 2: Analyzing the theory part with practical experiments, interpretation of experimental results, finding out errors, suggestions to improve the errors.

PSO 3: Develop and construct practical model systems from their conceptual knowledge.

PSO 4: Develop and construct practical model systems from their conceptual knowledge.

PSO 5: Acquire knowledge about basics of thermodynamics and working of heat engines and their practical applications

PSO 6: Acquire the theoretical basis of electrodynamics, Magnetism, Super conductivity, Classical, Statistical and Relativistic Mechanics, Optics, Solid State Physics, Quantum Mechanics, Nano technology.

PSO 7: Impart knowledge about the relevance of Industry Based Course and have attained handson training on experimental skills.

PSO 8: Distinguish Microscopic Macroscopic Systems and statistical distributions.

PSO 9: Acquire conceptual understanding of Physics to General real-world situations.

PSO 10: Integrate the Quantum Mechanics to understand the fundamentals of other branches of Physics such as Vibrational, Raman, Electronic, Resonance Spectroscopy.

PSO 11: Identify possible atomic and molecular energy levels and transitions and predict the existence of new elements.

PSO 12: Develop an idea regarding X-rays, and different spectroscopic techniques.

PSO 13: Acquire the knowledge of the basic idea about Electronics, Digital Electronics and working of different electronic components.

PSO 14: Students will use the knowledge of electronics and communication to analyze the contemporary communication systems and to design the system.

PSO 15: Apply the Langrangian and Hamiltonian formalisms to solve various dynamical problems which involve constraints.

PSO 16: Basic understanding and concepts of the causes, effects, and control of various types of environmental pollution.

PSO 17: Students will use the knowledge of Mechanics to describe the motion of objects in different force fields.

PSO 18: Develop Basic idea about linear and non-linear optical phenomena and their practical application in real world.

PSO 19: Use advanced computer language for problem solving and practical applications.

PSO 20: Acquire knowledge about the concept of project, methodology in research and working of scientific institutions.



DEPARTMENTOF PHYSICS

MSc. Physics

Programme Specific Outcomes (PSO's)

PSO1: Understand advanced physical concepts and phenomena

PSO 2: Enhance problem solving skills for integrated problem solving approaches in Physics.

PSO 3: Imbibe superior experimental skills for handling sensitive instruments for carrying out advanced experiments in Physics.

PSO 4: Develop research oriented learning and analytical capabilities.

PSO 5: Acquire capability for higher order thinking leading to motivation for research



DEPARTMENTOF ECONOMICS

M.A. Behavioural Economics & Data Science

Programme Specific Outcomes (PSO's)

PSO 1: To equip students with Basic and advanced knowledge in Economic Theories, Behavioural Economics and Data Science

PSO 2: To familiarise the students with various aspects of Applied Econometrics, Data Management & Cognitive Economics

PSO 3: To make the students capable of addressing and solving the issues in the Society and the economy by acquiring greater insight in the Behaviour of Economic Agents and Data Management they have acquired

PSO 4: To create academic excellence through holistic education.

PSO 5: To develop right skills in students catering to the needs of the Industry and Policy Makers.



DEPARTMENTOF ECONOMICS

BA Economics

Programme Specific Outcomes (PSO's)

PSO1: Understand the basic concepts of economics.

PSO2: To provide students with mathematical, statistical and econometric tools necessary for analysing economics issues.

PSO3: To introduce students to the fundamental concepts and theories of international trade, exploring the determinants and dynamic effects of trade policies.

PSO4: To provide students with advanced understanding of Economics and Development Issues, focusing on the Indian Economy as a whole and with special emphasis on the economy of Kerala.

PSO5: Cultivating research expertise in economics and honing skills in data collection, along with mastering the application of sampling techniques in research.

PSO6: Demonstrate the application of critical thinking skills in analyzing economic matters within the discipline of economics.



DEPARTMENTOF ENGLISH

BA English

Programme Specific Outcomes (PSO's)

PSO 1. Understand the specific socio-cultural backdrop of the formation of literary representations.

PSO 2. Understand the importance of the study of English language in relation to the study of language and literature of the mother tongue.

PSO 3. Identify the literary voices of dissent from diverse parts of the globe and to reflect on popular literature and culture.

PSO 4. Understand literature and literary expressions and its close connection with other art forms like painting, music, dance, movie and so on down the ages.

PSO 5. Comprehend the current modes of writing encompassing issues related to race, ethnicity, gender, climate change etc., and realise the role of literature in inculcating social sensitiveness.



DEPARTMENTOF ENGLISH

MA English

Programme Specific Outcomes (PSO's)

PSO 1. Demonstrate the ability to engage critically with a wide variety of selected texts by offering interpretations and evaluations from multiple theoretical perspectives.

PSO 2. Develop awareness about pertinent socio-cultural issues related to gender discrimination, environmental awareness, human rights etc.

PSO 3. Demonstrate the ability to analyse and explain the complexities and subtleties of human experience as reflected in literary and cultural texts.

PSO 4. Demonstrate the academic and language skills necessary to do independent, innovative research.

PSO 5. Demonstrate the ability to communicate effectively in a variety of language situations.



DEPARTMENTOF BOTANY & BIOTECHNOLOGY

BSc Botany

Programme Specific Outcomes (PSO's)

PSO 1: Distinguish and compare the evolution of major groups of plant kingdom.

PSO 2: Correlate the structure with various functions of plants and acquire knowledge regarding reproduction and embryo development.

PSO 3: Understand the organization of plants at gene, molecule, cell and tissue level.

PSO 4: Trace the biochemical pathway and understand the utilization and transformation of energy.

PSO 5: Understand the microbial diversity, their interaction with plants and the benefits.

PSO 6: Enrich the latest developments in the field of Information technology,

Biotechnology, Bio informatics and other related fields of research and development.

PSO 7: Socialize and live in harmony with nature and the need to protect the planet Earth.



MAVELIKARA DEPARTMENTOF BOTANY & BIOTECHNOLOGY BSc Biotechnology Programme Specific Outcomes (PSO's)

PSO1: Acquire basic concepts of biotechnology and other areas of applied life sciences. They should be able to understand and design and execute industry-oriented experiments in biotechnology using modern biotechnological tools, techniques and equipments.

PSO2: Be proficient in the theory as well as practical experiments, common equipments, laboratory, along with the collection and interpretation and presentation of scientific data in proper manner.

PSO3: Understand the basic knowledge and concepts of biotechnology and other related areas.

PSO4: Acquire the ability to apply their knowledge for practical applications which they can conduct independently.

PSO5: Apply their acquired knowledge in other advanced subject areas like Bioprocess technology nanobiotechnology, Immunotechnology, Pharmaceutical Biotechnology, Proteomics, Genomics, animal and plant biotechnology for the betterment and advancement of their professional career.

PSO6: Learn the theoretical and practical aspects of life sciences (of botany / zoology and biotechnology). To apply the knowledge of biotechnology to demonstrate research skills and develop technology for industrial and medicinal aspects.



DEPARTMENTOF BOTANY & BIOTECHNOLOGY

MSc Botany

Programme Specific Outcomes (PSO's)

PSO1: Develop the conceptual knowledge about the identification, classification, structure, development and reproduction of different groups of plant kingdom.

PSO 2: Comprehend the diversity, evolution, interrelationship among the group of plants and their beneficial aspects.

PSO 3: Understand the concepts and applications of microbiology, plant physiology, metabolism and ecological aspects in molecular and cellular level.

PSO4: Develops awareness about natural resources, its conservation and importance of sustainable lifestyles.

PSO5: Acquire knowledge in biotechnology, bioinformatics, biostatistics, biophysics, plant breeding, horticulture.

PSO6: Develop laboratory skills by performing experiments as per standard protocols in the novel areas of plant sciences.

PSO7: Get trained about various steps for the conduct of a research project, project report preparation and presentation.