

Guru Vishwambharkrupa Bahuuddeshiya Shikshan Prasarak Mandal Lakkadjawalga's

**SHIVNERI MAHAVIDYALAYA, SHIRUR ANANTPAL,
DIST. LATUR- 413544**

**PROGRAMME OUTCOMES
&
COURSE OUTCOMES**

Internal Quality Assurance Cell

PROGRAMME OUTCOMES & COURSE OUTCOMES

INTRODUCTION:

Shivneri Mahavidyalaya, Shirur Anantpal is affiliated to the Swami Ramanand Teerth Marathwada University, Nanded. The college offers three programmes at undergraduate level viz. Bachelor of Arts (B.A), Bachelor of Commerce (B.Com) and Bachelor of Science (B.Sc). The curriculum is designed by the affiliated university and the college is strictly abide to the guidelines issued by the university to implement the syllabus.

PROGRAMME - BACHELOR OF ARTS (B.A.)

Program Outcomes

Student seeking admission for B.A. programme is expected to imbue with following quality which help them in their future life to achieve the expected goals.

- a. Understanding and Realization of human values.
- b. Commitment for social service.
- c. Understand the Rights and obligations as a Citizen.
- d. Development of critical analyst.
- e. Adopt good moral and ethics in life.

ENGLISH COMMUNICATION (B.A./B.SC./B.COM.)

Course Outcomes:

- Through responding to and composing a wide range of texts, the learners will begin to use
- the English language in the best possible manner.
- Through the close study of texts, students will develop knowledge, understanding and
- skills in order to communicate effectively in English.
- Learners will value and appreciate the importance of the English language as a key to
- learning.
- Learners will gain the personal enrichment from study of literary pieces in English.
- Learners will acquire ability to communicate through oral and written texts.

B.A. Geography

Course Outcomes

- To help students to know the formation and nature of solar system, oceans, continents and landforms
- To know the formation of continents and Oceans
- To study the rotation and revolution of the earth and its impact
- To help students to know the different races of the world and respect them for peaceful coexistence
- To know the skills human adaptation to nature
- To understand man environment relationship.

- To help students to know the evolutionary process of various features of landforms
- To develop skills among the students to identify the landforms and their agents
- To have the knowledge of types rocks and weathering.
- To help students to understand the factors affecting on growth and distribution of Population.
- To study the phases of transition of population growth.
- To study structure and composition of population with reference to India.
- To help students to project, analyze and plan the population growth
- To develop the skills among the students to interpret the results using representation tools

PROGRAMME - BACHELOR OF COMMERCE (B.COM)

Program Outcomes

- This program could provide Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, warehousing etc., well trained professionals to meet the requirements.
- After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.
- Capability of the students to make decisions at personal & professional level will increase after completion of this course.
- Students can independently start up their own Business.

Course Outcomes:

- Students can get thorough knowledge of finance and commerce.
- The knowledge of different specializations in Accounting, costing, banking and finance with the practical exposure helps the students to stand in organization.
- The students can get the knowledge, skills and attitudes during the end of the B.com degree course.
- By goodness of the preparation, they can turn into a Manager, Accountant, Management Accountant, cost Accountant, Bank Manager, Auditor, Company Secretary, Teacher, Professor, Stock Agents, Government employments and so on.,
- Students will prove themselves in different professional exams like C.A., C S, CMA, MPSC, UPSC. As well as other coerces.
- The students will acquire the knowledge, skill in different areas of communication, decision making, innovations and problem solving in day-to-day business activities.
- Students will gain thorough systematic and subject skills within various disciplines of finance, auditing and taxation, accounting, management, communication, computer.
- Students can also get the practical skills to work as accountant, audit assistant, tax consultant, and computer operator. As well as other financial supporting services.
- Students will learn relevant Advanced accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.
- Students will be able to do their higher education and can make research in the field of finance and commerce.

PROGRAMME – BACHELOR OF SCIENCE (B.SC)

Program Outcomes:

Students taking admission to this program of B.Sc. are expected to get equipped with following outcomes:

- a. Explaining the basic scientific principles and methods.
- b. Inculcating scientific thinking, awareness and temper among the student.
- c. Ability to convey the scientific knowledge in regional language and in English.

- d. Ability to handle the unexpected situation by critically analyzing the problem.
- e. Understanding the issues related to nature and environmental contexts and sustainable development.

Courses Outcomes:

Chemistry

- An Ability to employ Critical Thinking
- An efficient Problem–Solving Skills in the Three Basic areas of Chemistry (Organic ,Physical & Inorganic).
- An Ability to Conduct experiments.
- An analyze data and interpret results, while observing responsible and ethical Scientific conduct.
- Student will be able to give IUPAC nomenclature of Organic Compound.
- Able to recognize mechanism for given Chemical Reactions.
- Able to write Electronic Configuration, Geometry, hybridization of Atomic orbital.
- Student will be able to Describe Basic Concepts in Physical Chemistry.

Botany

- To provide an updated education to the students at large in order to know the importance and scope of the discipline and to provide mobility to students from one university or state to other.
- To update curriculum by introducing recent advances in the subject and enable the students to face NET, SET, UPSC and other competitive examinations successfully.
- To impart knowledge of plant science as the basic objective of Education.
- To develop a scientific attitude to make students open minded, critical and curious.
- To develop an ability to work on their own and to make them fit for the society.
- To expose themselves to the diversity amongst life forms.
- To develop skill in practical work, experiments, equipment's and laboratory use along with collection and interpretation of plant materials and data.
- To make aware of natural resources and environment and the importance of conserving the same.

- To develop ability for the application of the acquired knowledge in the fields of life so as to make our country self-reliant and self-sufficient.
- To appreciate and apply ethical principles to plant science research and studies

Dairy Science

- Impart training to develop confidence in the management practices in:
 - a) Raising sheep, goat, poultry and pig.
 - b) Care and management of different classes of livestock.
- To inculcate knowledge of Production of hygienic milk, Manufacture of milk products indigenous and western Dairy products.
- To prepare young and enthusiastic entrepreneur for self- employment through dairying and dairy associated activities.
- Development as a supervisor in a dairy plant either in equipment and plant design or project execution.
- Entrepreneurs as a dairy consultant or take up entrepreneurial ventures in milk plants or ice cream, cheese, butter units.

Environmental Science

- Production of skilled human resource in the field of Environmental Science which leads the society to resolve the various environmental issues and associated problems through their active participation, knowledge, skill, attitude, awareness and abilities.
- Gaining variety of experiences and acquire basic understanding of environmental aspects.
- Acquire a set of values and feelings of concern for environment and the motivation for active participation environmental improvement and protection.
- Acquire skills for identifying and solving environmental problems.
- Evaluation of environmental measures and education program in terms of ecological, economic, social, aesthetic and educational factors.
- Understand developmental activities and Environmental problems.
- Understand the importance of resource management to achieve the goals of sustainability.

Mathematics

After successful completion of the course student will be able to

- Understanding concept of Limit, Continuity of Single and two variable Functions.
- Find the Higher order derivatives of Product of Functions.

- Expand functions in terms of infinite series.
- Find Equation of Tangent, Normal and Length of Tangent, Normal, Sub-tangent, Sub-normal.
- Add, Subtract and Multiply two Matrices.
- Recognize the different types of Matrices.
- Find the Inverse of invertible Matrices.
- Determine the Rank of a Matrix
- Transform matrix to Row Echelon form
- Understanding the basic concept of sets and their properties.
- Understanding the concept of a neighborhood of a point, interior points of a set, open set.
- Understanding concept of limit points of a set, closed set, closure of a set, Dense set.
- Understanding the basic concept of sequences, subsequences, bounds of Sequences,
- Understand the concepts on an equivalence relation.
- Find the examples of equivalence relation.
- Check whether the given set, is a group for the given operation or not.
- Understand the general properties of groups.
- Understand the Concept of Convergence of Sequences, Concept of open and Close Sets
- Understand the Concept of Completeness Properties
- Understand the Concept Finite Intersection property
- Understand the Concept of Bolzano Weirstrass property
- Construction of Linear Programming Problems

Physics

- Introduce the students to the world of mechanics and properties of the matter that exists in different phases i.e., solid, liquid and gas. Laws of motion and its applications to various systems.
- To develop knowledge in mathematical physics and its applications, to develop expertise in mathematical methods required in the study of Physics, to develop critical thinking and problem-solving skill.
- The world of heat and thermodynamics and the behavior of the physical systems at different thermodynamical conditions.

- The concepts of static and dynamical electrical magnetic fields, the sources for generating such fields, polarization and induction effects, understand the basic difference between the DC and AC circuits and their functioning.
- To the concepts of mechanical waves, their properties, propagation and reflection properties, formation of standing waves, their applications in resonance tubes, energy distribution in the standing waves, free and forced vibrations, acoustics and acoustical designs and also introduces the students to the concepts of ultrasonic waves and their applications.
- To the concepts of macroscopic world, statistical approaches for understanding properties of the macroscopic bodies, ensembles, their classification on the basis of macroscopic and microscopic basis, their applications to photonic and electronic gases, electromagnetism, Maxwell's equations and their applications in the electromagnetic waves, energy carried by the EM waves and theory of relativity.
- Optics introduce to the concepts of geometrical optics, properties of optical instruments, interference and diffraction of light, polarization of light and finally introduces to the advanced source like LASERS and conditions for the lasing action.
- Identify and understand construction and properties of different types of P-N junction diodes. Apply knowledge of semiconductor devices to use them in different combinations to see their applications as amplifiers and oscillators. Design different circuits using semiconductor devices and demonstrate their usage.
- To the world of microscopic particles such as molecules, atoms, atomic nuclei and elementary particles, study their dynamics employing wave analogy, and also to make the connections between the rules governing the microscopic particles with that of the macroscopic bodies around us.
- To provide fundamental knowledge of the crystallography, principles behind the formation of matter, their structure and physical properties. This course also enables the students to understand the relationship between the internal structure and various properties of matter such as periodicity, structure and bonding in solids, making these solids an attractive material for the device applications.

- To the world of physics of atoms, molecules and nuclei, their structures, emission of Gamma rays, X-rays, optical and microwave spectra from these systems, the interaction of atoms and molecules with electric and magnetic fields.
- To understand the importance and interconvertibility of various number systems, principles of digital gates, and working principle of communication systems.
- To introduce the students to the practical applications of the core courses in Physics that the students have studied in all Semester.
- To acquire skills related to characteristics and usage of the instruments for measurement of the electrical quantities like voltage, current, impedance and various other quantities using analogue and digital meters. create awareness among the students about use of the non-conventional energy sources such as solar energy, wind energy, tidal energy, biomass, etc.

Microbiology

- B. Sc. Microbiology syllabus is crafted to serve the need of choice-based credit system course structure to orient and practically train students in the field of Microbiology. The course is specifically bringing core courses, skilled enhanced and discipline elective courses together dealing additional domain of knowledge in this field of study where in Core Course includes Introductory and basic microbiology, microbial physiology and biochemistry, applied microbiology, immunology and medical microbiology.
- Skill enhanced courses includes public health, diagnostic microbiology, medical laboratory technology and microbial bio fertilizers, and also on enzyme, bioprocess technology, GMP and molecular biology techniques is well suited to understand application of scientific and engineering skills to the processing of materials by microorganisms.
- DSE course based on microbial genetics and molecular biology is concerned with genes, mutation, recombination, DNA replication, transcription, translation, associated phenomena and their manipulation and techniques of such manipulation. Another DSE course (with choice) provide an option to learn diverse metabolic events occurring in view of the particular microorganisms and its environment and agriculture and to relate this information to a biology as a whole.

- This course is giving emphasis on enzymology, microbial metabolism, and nitrogen metabolism also offer industrial microbiology or pharmaceutical Microbiology as DSE courses is an area of applied microbiology which deals production of various useful end products on large scale.
- The course is specifically bringing core courses, skilled enhanced courses together dealing additional domain of knowledge in this field of study where in Core Course includes applied microbiology, immunology, Food, Soil Microbiology and Microbial Ecology and medical microbiology. Skill enhanced courses includes public health, diagnostic microbiology, medical laboratory technology and microbial bio fertilizers, which is well suited to understand application of microorganisms in relation to health, diagnosis, and as fertilizers.
- Applied microbiology course trains students for gaining expertise in the microbial world and the way it interacts with humans. It looks at how we can harness and utilize the powers of the microbes in areas ranging from air, water and sewage microbiology to Milk Microbiology and extends to industrial applications. A wide range of microbial by-product production, quality assessment and health hazard monitoring is possible by students who get well versed in this course.

Zoology

- Understanding of animal structure to experimentation, farming or management of animals.
- Skill development in areas of zoology as Physiology, Biochemistry, Cytology, Genetics, Evolution & Genetic Engineering.
- Development of wide perspective among the students regarding the biological sciences.
- Foundation knowledge of basic concept of the subject will help the student in specialized post-graduate courses and research in the relevant field.
- Understand the latest developments in the fields of genetics and genetic engineering are an essential aspect of their future in academics in zoology.