

Programme Outcomes (POs) for UG courses of Faculty of Life Sciences

1. To develop skills in graduate students to be able to acquire theoretical and practical knowledge in fundamentals of biology in respective disciplines of plants, animals, microbes and environment.
2. To inculcate ability to critically evaluate problems and apply lateral thinking and analytical skills for professional development.
3. To create awareness on ethical issues, good laboratory practices and biosafety.
4. To develop ability in youth for understanding basic scientific learning and effective communication skills.
5. To prepare youth for career in teaching, industry, government organizations and self Reliant entrepreneurship.
6. To make students aware of natural resources and environment and its sustainable Utilization.
7. To provide learning experience in students that instills deep interest in biological science for the benefit of society.

Programme Learning Outcomes (PLOs) for UG courses of Faculty of Life Sciences

1. Inculcate comprehensive knowledge and acquire skills in the field's biology
2. Develop experimenting skills in laboratory that enhances critical thinking skills, logical application these skills in problem solving
3. To equip students with necessary theoretical and practical skills to enable them to pursue multidisciplinary courses at Post Graduate level.
4. Demonstrate the abilities to work in collaborative activities and inculcate leadership qualities
5. Identify and follow the ethical issues related to Biology, biosafety, and perform unbiased and truthful actions
6. Capability for raising relevant questions relating to basic understanding and applications biology and planning, executing and reporting the results of an experiment or investigation

Semester I

After completing this course, the learner will be able to:

1. To acquaint with History and Scope of microorganisms
2. To give theoretical knowledge of isolation and growth of microorganisms

3. To impart knowledge of maintenance of cultures and sterilization techniques
4. To give detailed knowledge about structure of bacteria
5. To impart practical knowledge of isolation culturing maintenance, Sterilization and staining of microorganisms

Semester II

After completing this course, the learner will be able to:

1. To acquaint with growth, measurement and factors affecting bacterial growth
2. To introduce concept of enzymology and methods of transport of compounds
3. To give information of carbohydrates, proteins and lipids
4. To acquaint with important metabolic pathways in microbes
5. To provide technical expertise for isolating and culturing microorganisms and colorimetric method for carbohydrates and proteins, and handling enzyme