DEPARTMENT OF BIOSCIENCES
INTEGRAL UNIVERSITY, LUCKNOW

Program Outcomes (POs): UG

1. **Critical Thinking:** Students will demonstrate an understanding of major concepts in all disciplines of basic life sciences, biochemistry and biotechnology. Understand the basic concepts, fundamental principles, the scientific theories related to various biological phenomena, their relevancies in the day-to-day life and their applications.

2. **Effective Communication**- Development of various communication skills such as reading, listening, speaking, etc., which we will help in expressing ideas and views clearly and effectively.

3. Social Interaction- Development of scientific outlook not only with respect to science subjects but also in all aspects related to life

4. **Effective Citizenship:** Imbibe moral and social values in personal and social life leading to highly cultured and civilized personality.

5. **Ethics:** Follow the ethical principles and responsibilities to serve the society.

6. **Environmental Management:** Understand the issues of environmental contexts and sustainable development.

7. **Self-directed and Lifelong learning**- Students will be capable of self-paced and self-directed learning aimed at personal development and for improving knowledge/skill development

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DEPARTMENT OF BIOSCIENCES
INTEGRAL UNIVERSITY, LUCKNOW

Program Outcomes (POs): PG

1. **Critical thinking:** In depth knowledge of basic and applied area of Biotechnology, Biochemistry and Microbiology. Capability to demonstrate basic and comprehensive knowledge by critically and clearly understanding major concepts, theoretical principles techniques and experimental findings related to applied biosciences as well as creatively applying the related skills for industrial application. Ability to engage in reflective and independent thinking for analyzing, formulating and tackling problems related to the field of biological sciences.
2. **Effective Communication:** Excellent communication skills to transmit complex technical information related to applied biosciences in a clear and concise written and verbal manner as oral presentations and compilation in the form of scientific reports.
3. **Social Interaction**- Comprehend to apply contextual multi-disciplinary knowledge to assess societal, health, safety, and cultural issues relevant to the science practices.
4. **Effective Citizenship**- Imbibe moral and social values in personal and social life leading to highly cultured and civilized personality.
5. **Ethics**-: Demonstrating the moral and ethical dilemma related to IPR, copyright, plagiarism, legal compliance, quality control, transparency and accountability to form unbiased multi prospective appreciating culture for biosciences related aspects.
6. **Research related skills**: Will develop ability to identify problems, formulate hypothesis, give justifications for solutions by intensive research, critical analysis & laboratory investigations by using appropriate research related biological skill to develop sustainable product & report accurately the findings in the form of a patent or publication. The course will also take students beyond biological knowledge into the world of industrial professionals.
7. **Environment and Sustainability**- Understand the impact of the biological research in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Self-directed and Lifelong learning-** Student will capable to learn independently, to generate effective ideas, screen for critical literature, identify appropriate resources by effective time management for problem based learning, dissertation and laboratory work which provides a foundation for future leadership roles in biosciences. They will develop self-sustainability, positive attitude, competitiveness, employability for improving creativeness, knowledge skills and to meet socio-economic objective for creating better opportunities as well as professional quality of life in broader area of biological sciences.