

ST. JOSEPH'S COLLEGE (AUTONOMOUS)

BENGALURU-27



Re-accredited with 'A++' GRADE with 3.79/4 CGPA by NAAC
Recognized by UGC as College of Excellence

DEPARTMENT OF MICROBIOLOGY

SYLLABUS FOR CERTIFICATE COURSES OFFERED

Ethics in Life Sciences and Health care Sector

Name of the Department : Microbiology
Course Director : Dr. W. Jothy
Title of the course : Ethics in Life Sciences and Health care Sector
Duration of the course : 30 hrs (2 hrs/ week)
Credits : 1 credit

About the Course Director:

Dr. W. Jothy is working as an Assistant Professor in the Department of Microbiology since 2008. She is teaching both Undergraduate and Postgraduate courses of Microbiology. The subjects taught in her career include, Cellular Microbiology, Recombinant DNA Technology, Microbial and Cell Culture Technology, Medical Microbiology, Microbial Genetics, Food Microbiology and Microbial Technology. Her area of specializations are plant tissue culture and Agricultural Microbiology.

Course Objectives:

- ◆ The focus of the course will be the exploration of various moral values, legal and policy issues related to human life and medical challenges.
- ◆ It also focuses on the influence of biotechnology and bioethics in each of them.
- ◆ The course will give the sense of responsibility in the use of newer technologies with at most care.
- ◆ Case studies in this course focus on real issues in real life and real time.

Who can apply? Open to all.

Course Fee: 3000/-

Contact details:

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Mobile No.: 9986624723

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CERTIFICATE COURSE

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Course Content

Module – 1

(1 Hr)

Introduction and History of Bioethics. Scope of Bioethics in life sciences and Health care sector

Module - 2

Reproductive Ethics

(5 Hrs)

Introduction to Assistive reproductive technologies (ART). Ethical issues related to ART, Surrogacy, Preimplantation genetic diagnosis and Sex selection of embryos or fetus. Ethical issues related to abortion. Case studies.

Module - 3

Human Enhancement Ethics

(6 Hrs)

Use of Medical technologies for enhancement (Happy pills, Cosmetic surgical procedures, Doping in sports, Anti-aging medicine, Cognitive enhancement). Pros and cons of enhancement techniques. Case studies.

Module - 4
Ethics of Euthanasia

(5 Hrs)

Basics of Euthanasia and Death with Dignity. Forms of euthanasia. Ethical analysis of euthanasia. Movie screening and critical review.

Module - 5
Transplantation Ethics

(5 Hrs)

Over view of organ transplantation. Types of organ donors. General view on transplant laws in India. Brain death and organ transplantation. Organ trafficking- causes and consequences. Forced organ harvesting. Case studies.

Module 6
Ethical issues in Cloning

(5 Hrs)

Overview of cloning. Purpose of cloning. Effect of reproductive cloning on the child/parent relationship. Pros and cons of cloning humans. Overview of cloning in animals and plants and its applications. Movie screening and critical review.

Module 7
Ethics and Biological Warfare

(4 Hrs)

History and overview of Biological warfare, Bioterrorism and Biocrime. Biowarfare as an emerging threat to mankind. Biodefense. Ethical challenges in biodefense and bioterrorism. Case studies.

Course Outcome:

After completing the course, the students will have,

CO1	Knowledge and understanding of the key concepts and the problems associated with the advancements in existing technologies in life sciences.
CO2	Skills to analyze and argue on different ethical issues pertaining to human life.
CO3	Ability to express their knowledge and understanding acquired through this course.