

# **Ethics in Life Sciences and Health Care Sector**

**Programme Director : Dr. W. Jothy**

**sjcmic04cc@gmail.com Mobile No.: 9986624723**

**Duration of the course : 30 hrs (2 hrs/ week)**

**Credits : 1 credit**

**Course Fee : INR 4000/-**

**Who can apply? Open to all**

## **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.**

## **Syllabus**

### **Module -1**

#### **Inroduction (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 Assisted reproductive technologies (ART). Ethical issues related to ART, Surrogacy, Pre-implantation 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 Bio crime. 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,

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