(HS-219) - Professional Ethics

Course Outline:

Theory:

1. **Introduction to Professional & Engineering Ethics:**
    1. Definitions - Ethics, Professional Ethics, Engineering Ethics, Business Ethics;
    2. Ethics & Professionalism.
    3. Need and scope of Engineering and Professional Ethics through case studies;
    4. Development of Engineering Ethics & Major issues in Engineering & Professional Ethics;
2. **Moral Reasoning & Ethical Frameworks:**
    1. Ethical Dilemma;
    2. Resolving Ethical dilemmas and making Moral Choices;
    3. Codes of Ethics (of local and international professional bodies).
3. **Moral Theories:**
    1. Utilitarianism,
    2. Rights Ethics and Duty Ethics, Virtue Ethics Self-Realization & Self Interest;
4. **Ethical Problem Solving Techniques:**
    1. Line drawing, flow Charting, Conflict Problems;
    2. case studies and applications;
5. **Contemporary Professional Ethics:**
    1. Professional Responsibilities;
    2. Risk and Safety as an Ethical Concern for Engineers,
6. **Workplace Responsibilities and Ethics:**
    1. Teamwork.
    2. confidentiality and conflicts of interest,
    3. Whistle blowing,
    4. Bribe and gift,
    5. risk and cost - benefit analyses,
    6. gender discrimination and sexual harassment;
    7. Environmental Ethics;
    8. Honesty;
    9. Truthfulness, trustworthiness, academic and research integrity

Suggested Teaching Methodology:

- Lecturing
- Written Assignments Report Writing

Suggested Assessment:

Theory (100%)

- Sessional (20%)
- Quiz (12%)
- Assignment (8%)
- Midterm (30%)
- Final Term (50%) ## **Text and Reference Books:**

1. Ferrell, O.C., and Fraedrich, John, Ethical Decision Making and Cases, New York: Houghton Mifflin.
2. Engineering Ethics 4th Edition, by Charles Fleddermann.
3. Engineering Ethics, Outline of an Aspirational Approach, by W. Richard Bowen
4. Theory and Contemporary Issues. Barbara MacKinnon, Andrew Fiala

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