BME201e Biomedical Ethics

Level: 2

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JULY

E-Learning: BLENDED - Learning is done MAINLY online using interactive study materials in Canvas. Students receive guidance and support from online instructors via discussion forums and emails. This is supplemented with SOME face-to-face sessions. If the course has an exam component, this will be administered on-campus.

Synopsis:

This course covers the ethics and morality of choices and decisions regarding medical research. It aims to develop a sense of heightened sensitivity and professionalism in bio-related research scientists and engineers.

Topics:

● Ethics and Professionalism in Engineering
● Methods, Moral Concepts and Theories in Ethics
● Responsible Conduct of Science
● Ethics in Genetic Screening and Genetic Engineering
● Ethics of Live-sustaining Biomedical Engineering Design
● Bioethics regulations in Singapore

Learning Outcome:

● Discuss the meaning of ethics, different ethical theories, and its applications in the area of biomedical sector.
● Compare traditional and current issues in biomedical ethics.
● Explain theories of ethics: teleological and deontological.
● Discuss in depth about the pros and cons of each ethical problem presented, and compare and contrast the different ethical views in a same problem.
● Apply the ethical decision tool as a guide in making an ethical decision.
● Examine potential ethical dilemmas in their work as a biomedical engineer, (e.g. in research, allocation of life sustaining machine).
● Recommend possible actions to be taken in responses to these dilemmas.
● Identify the probable consequences of those actions.

Assessment Strategies (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-CLASS QUIZ 1	2
	PRE-CLASS QUIZ 2	2
	PRE-CLASS QUIZ 3	2

Overall Continuous Assessment	TUTOR-MARKED ASSIGNMENT 1	24
Overall Examinable Components	Written Exam	70
Total		**100**