

Zarqa University

Faculty of engineering

Department: civil engineering

Course title: Engineering ethics



Prerequisite: -----

Instructor: Eng. jaffar Al-Btoosh

Lecture's time: As schedule

Semester: 2nd

Office Hours: As schedule

Course description:

This course is designed to introduce undergraduate engineering students to the concepts, theory and practice of engineering Ethics.

It will allow students to explore the relationship between ethics and engineering and apply classical moral theory and decision making to engineering issues encountered in academic and professional careers.

Aims of the course:

1. An understanding of their duties and responsibilities as professionals through Gaining knowledge of the philosophies of ethics, professional practice, and world culture
2. Basic knowledge to make informed ethical decisions when confronted with problems in the working environment.
3. Improved awareness of potential ethical issues within an engineering context.
- 4) Team skills through working in teams on assignments and in class assignments

Intended Learning Outcomes (ILOs):

1. Improved ability to function on multidiscipline teams.
2. Students will have an understanding of professional and ethical responsibility.
3. Students will have an improved ability to communicate effectively.
4. Students will have knowledge of contemporary issues.



Course structures:

Week No.	Lecture Topic
Week 1	Syllabus & Course introduction and overview
Week 2	The importance of ethics in science and engineering
Week 3	The role of codes of ethics
Week 4	Professional responsibilities of engineers
Week 5	Truth (personal and social)
Week 6	Engineers in organizations
Week 7	Case study
Week 8	MID EXAM
Week 9	Privacy and confidentiality issue
Week 10	Ethics and the environment
Week 11	Sustainable engineering
Week 12	Global and cultural considerations
Week 13	Class summary and closure
Week 14	Final Exam (50%)

References:

Harris Jr., C.E. , Pritchard, M.S., Rabins, M.J., Engineering Ethics, Concepts, and Cases: 4th edition (California: Wadsworth Learning, 2009).

Whitbeck, Caroline. Ethics in Engineering Practice and Research–: 2nd edition (Cambridge: Cambridge University Press, 2011)

Assessment Methods:

Methods	Grade	Date
Homework's and participation	10	As schedule
MID Exam	20	As schedule
REPORT	20	As schedule
Final Exam	50	As schedule

