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CE3211 CIVIL ENGINEERING LAWS, ETHICS & CONTRACTS

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Engr. Reynaldo Perez-Ramos, PhD
Civil Engineering Department
College of Engineering and Technology

ROMBLON STATE UNIVERSITY
ODIONGAN 5505 MIMAROPA Region
PHILIPPINES

VERSION 1

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MODULE ONE: Introduction to Engineering Profession

BACKGROUND

This module covers the introductory discussion on the nature of functions and duties of the engineers, relationship with other professionals in terms of education, knowledge, communication skills, traits, ethical and personal relations. This is also provides relevant topics related engineering professional ethics, responsibility, standards and moral values as well as professional development and benefits, including relevant definition of terms.

At the end of this module, it is expected that the student is able to:

- *define what is profession, engineering, ethics or morality, professional ethics, and engineering ethics;*
- *differentiate the various engineering tasks and their potential moral problems;*
- *familiarize with some impediments or obstacles to responsive professional action;*
- *aware the common traits of good engineers to become successful professionals; and*
- *explain the importance of engineering ethics*

I. BASIC DEFINITION OF TERMS

ETHICS: a set of standards by which a particular group decides to regulate its behavior. It is a system of moral principles by which human actions and proposals may be judged as good or bad

MORALS: rules for right conduct for all individuals

MORALLY RESPONSIBILITY: It refers to holding to people morally accountable for some past action or actions. It also means care, welfare, or treatment of others as derived from the specific social role that one plays in the society. It is likewise referring to one's capacity for making moral or rational decisions on his own.





BUSINESS ETHICS: Business is a complex enterprise that involves several activities: purchasing, manufacturing, marketing, advertising, selling and accounting. It is the study of what is right and wrong human behavior and conduct in business. It is also the study of the perceptions of people about morality, moral norms, moral rules and ethical principles as they apply to people and institutions in business. It is the study, evaluation, analysis, and questioning of ethical standards, policies, moral norms, and ethical theories that managers and decision makers use in resolving moral issues and ethical dilemmas affecting business

PROFESSION: consists of a group of people organized to serve a body of specialized knowledge in the interests of a society. At the center of a profession is a set of skills, proficiencies, techniques and competencies involving a line of work.

CODE OF ETHICS: As a set of principles that serve to guide the professionals in their daily work. It is more than a minimum standard of conduct and requires that the professionals to whom the codes are aimed engage with them and develop a personal position/stand, which they can defend in terms of code of ethics. Code of Ethics or Code of Conduct serves to maintain the integrity of the profession so that its members serve “society’s best interests.” It also specifies the moral considerations of professional life as well as penalties and sanctions for violating them.

Codes of Ethics are not stand-alone guarantee of ethical conduct or substitute for an individual conscience but are established as a guide for professionals in ethical dilemmas. Scientists and engineers should develop and justify their own views and moral position within the context of their relevant code.

IDEOLOGY: the body of doctrine, myth and symbols of a social movement, institution, class, or large group

ENGINEERS: The profession in which the knowledge of the mathematical and physical sciences gained by study, experience and practice with judgment to develop ways to utilize economics, materials and forces of nature for the progressive well-being of human kind.

II. PROFESSION AND ETHICS

2.1 What is profession?

- It referred to a free act of commitment to a way of life. The act or fact of professing – when a person occupies a special social role that carries with it stringent moral requirements.

- It referred to anyone who professed to be duly qualified
- It also means that an occupation which one professes (admits, agrees) to be skilled and to follow.
- It is a vocation in which professed knowledge of some branch of learning is used in its application to the affairs of others
- It is an example of social practice that has one or more aims or goods that are especially associated with it or internal to it. It also provides a moral criterion for evaluating the behavior of those who participate in the social practice and for resolving moral issues that might arise in the practice.



2.2 A Socratic Account of Professionalism (based on Greek philosopher Socrates as proposed by philosopher

Michael Davis)

A profession is a number of individuals in the same occupation voluntarily organized to earn a living by openly serving a moral ideal in a morally permissible way beyond what law, market, morality, and public opinion would otherwise require. Thus, a profession should:

- Cannot be composed of only one person, rather composed of a number of individuals
- Involves a public element – should openly “profess” to be a professional (engineer, physician, etc.)
- It is a way people earn a living and something that occupies them during their working hours
- It is something that people enter into voluntarily and that they can leave voluntarily
- It advocates of the social practice approach – serves morally praiseworthy goal by morally permissible means

2.3 Key Characteristics of Modern Profession

- substantial intellectual and practical training
- provision of a specialized skill and service
- high degree of professional autonomy and responsibility
- an occupational organization controlling the profession
- embargoes/restrictions on methods of attracting business
- a trust relationship with the client

III. DIFFERENCE BETWEEN ETHICS AND MORALITY

Ethics – derived from the Greek word *ethos* (Latin means “mores”) which means “characteristic way of acting” which is proper to man as a rational being. As a science, it is to investigate the nature of the human act or human conduct. It is a practical science that guides us in our actions that we may live rightly and well or it lays down the principles of right living. It is guided by standards and judgments which people create.

Morality – refers to the quality of goodness or badness in a human act. Good is described as “moral” and bad as “immoral”. Morals is the rules for right conduct for all individuals. It implies judgment and refers to what we would call moral standards and moral conduct.



Therefore, it is viewed that MORALITY IS NOTHING ELSE BUT A DOING OF ETHICS. ETHICS is used to refer to the formal study of those MORAL STANDS AND MORAL CONDUCT.

3.1 Engineering Professional Ethics

Two Models of Professionalism

Business Model – an occupation that is primarily oriented toward making a profit within the boundaries set by law (regulations imposed by law)

Professional Model – an occupation that have an implicit trust relationship with the larger public – trust relationship means as “social contract” with the public, are that professionals agree to regulate their practice so that it promotes the public good. In other words, of most engineering codes, they agree to hold paramount the safety, health and welfare of the public. They agree to regulate themselves in accordance with high standards of technical competence and ethical practice so that they do not take unfair advantage of the public.

3.2 Three Types of Ethics or Morality

Common Morality – is the set of moral beliefs shared by almost everyone. It is the basis or at least the reference point compare to other types of morality. It primarily negative or it does contain a positive or aspirational component in such precepts as “prevent killing.” It also makes a distinction of action based on an application of the types of moral precepts we have been considering, but an evaluation of the person himself is based on intention.

Personal Morality – or personal ethics is the set of moral beliefs that a person holds. This is closely parallel the precepts of common morality. For Example, we believe that murder, lying, cheating, and stealing are wrong. However, our personal moral beliefs may differ from common morality in some areas.

Professional Ethic – is the set of standards adopted by professional in so far as they view themselves acting as professionals. It is usually stated in a formal code. It is focus on the issues that are important in that profession. It is supposed to take precedence over personal morality. It also differs from personal morality in its degree of restriction of personal conduct. It has a negative and a positive dimension – preventing and avoiding evil and doing or promoting good. It related to “role morality” - it is the moral obligations based on special roles and relationships.

IV. IMPORTANCE ROLES OF PROFESSIONAL CODE OF ETHICS

- a. Serving and protecting the public or society
- b. Guidance for the primary responsibilities
- c. Inspiration, motivation and collective commitment
- d. Shared standards for excellence fair competition
- e. Positive Support for responsible professionals
- f. Education and mutual understanding about moral responsibilities of professionals
- g. Deterrence (prevention/restriction) and discipline
- h. Contributing to the profession’s positive image



V. PROFESSIONAL CONFLICTS OF INTEREST

These are situations where professionals have an interest that, if pursued, might keep them from meeting their obligations to their employers or clients. These interests involve serving in some other professional role, or making substantial private investments in a competitor’s company. These conditions may arise when these two conditions are met: (a) the professional is in a relationship or role that requires exercising good judgment on behalf of the interest of an employer or client, and (b) the professional has some additional or side interests of the employer or client.

There ways that conflicts of interest may arise such as: gifts, bribes, kickbacks; interest in other companies; and insider information. Note that conflict of interest is different from “conflicting interests”. Conflicting interests means that a person has two or more desires that cannot all be satisfied given the circumstances.



VI. PROFESSIONAL RIGHTS

These are special rights that arise from professional role and the obligations it involves. Three professional rights have special importance: (a) the basic right of professional conscience, (b) the right of conscientious refusal, and (c) the right of professional recognition.

The right of professional conscience – is the moral right to exercise professional judgment in pursuing professional responsibilities and duties. Pursuing those responsibilities involves exercising both technical judgment, and reasoned moral convictions. The right of conscientious refusal is the right to refuse engage in unethical behavior and to refuse to do so solely because one views it as unethical.

Right of Recognition – This is the right of professional for their work and accomplishments which involves fair monetary remuneration, and nonmonetary forms of recognition.

Employee Rights –These are any rights, moral or legal that involves the status of being an employee.
Privacy Right – This is a right to pursue outside activities can be thought as a right to personal privacy in the sense that is means the right to have a private life off the job. It is also means the right to control the access to and the use of information about oneself.

Right to equal opportunity: preventing sexual harassment – It is the unwanted imposition of sexual requirements in the context of a relationship of unequal power.

Right to equal opportunity: nondiscrimination – It relates to sex, color, age, or political or religious outlook or affiliations.

Right to equal opportunity: affirmative action – It is giving preference or advantage to a member of a group that in the past was denied equal treatment, in particular, women and minorities (indigenous people) or people with disabilities.

LIST OF REFERENCE MATERIALS

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- Ramos, R.P. (2019). *Fourth Industrial Revolution: Opportunities and challenges on higher education institutions (HEIs) towards 2030 Sustainable Development Goals (SDGs) Agenda*, A technical paper presented during the Philippine Institute of Civil Engineers (PICE) 45th National Convention and Technical Conference, Pasay City, Metro Manila.
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MODULE ASSESSMENT

ASSESSMENT/ASSIGNMENT #1: REFLECTIVE SHORT ESSAY

TITLE: The Role of Civil Engineering Education and Practice in the Fourth Industrial Revolution (FIRe 4.0)

Write an essay of minimum of 300 words about the title above. The essay should contain your own personal ideas and aspirations that explain why Civil Engineering Education and Professional practice is very important and relevant in the Fourth Industrial Revolution. Cite situations and examples to support your answers. You can read the article entitled below to get some ideas.

- (a) FOURTH INDUSTRIAL REVOLUTION: OPPORTUNITIES AND CHALLENGES ON HIGHER EDUCATION INSTITUTIONS (HEIs) TOWARDS 2030 SUSTAINABLE DEVELOPMENT GOALS (SDGs) AGENDA
- (b) THE PHILIPPINE PERSPECTIVES IN ENGINEERING

These articles is posted in the link: Reading Materials. These materials also available at weebly.com site.

A handwritten essay and write it down in your notebook. Indicate the number of words. Take a photo of your notebook and submit to the assigned link in Google Classroom account. The pdf file name is: **SURNAMEFIRSTNAMEINITIAL_ASSESSMENT#1**

DEADLINE: 24 APRIL 2021, 23:59PM

“PLAGIARISM IS AN ACADEMIC CRIME, NOT BE TOLERATED.”