Student Notes to

"Law & Ethics in Bio-Medical Engineering"

Ethical Method of Reasoning

✓ Students should be able to reason about ethical issues

1 The moral point of view

A. What is ethics?

B. The world of ethics

C. The universal experience of duty

D. Moral experience is universal, but some moral perceptions and judgments vary

E. Universality and variability of human morality

F. Moral statements

2 **The nature of moral judgments**

    A. Three types of sentences

    B. Surface grammar and depth grammar

    C. Moral criteria and moral judgments

An ethical method of reasoning

A. First step: Fact deliberation

    i The case

    ii Deliberation about the facts

B. Second step: Value deliberation

    i Identification of the moral problems

    ii Choice of the main problem

    iii The values at stake

C. Third step: Duty deliberation

i Reflecting on the most challenging cases

ii Reflecting on other cases

D. Fourth step: Testing consistency

E. Fifth step: Conclusion

- One goal of ethics is to determine right decisions, and in order to do that, it is necessary to go step by step, analyzing, first, the facts of the case, second, the values at stake, and third, the duties.

❑ **What is bioethics?**

✓ Students should be able to explain the difference between medical ethics and bioethics

✓ Students should be able to differentiate bioethics, law, culture, and religion

✓ Students should be able to explain the principles of bioethics and how to balance these principles in practice

The birth of bioethics

A. The coining of the word 'bioethics'

B. Bioethics as bridge between facts and values

C. Bioethics versus medical ethics

D. The idea of Potter

E. Bioethics as global ethics

F. Health and disease as values

❑ The word *bioethics* was coined in the early 1970s by biologists in order to encourage public and professional reflection on two topics of urgency:

✓ 1) The responsibility to maintain the generative ecology of the planet, upon which life and human life depends; and

✓

✓ 2) The future implications of rapid advances in the life sciences with regard to potential modifications of a malleable human nature.

Question I

❑ Respirators were originally invented for people who were expected to recover and be able to breathe on their own.

❑ Within a short period of time they began to be used on people in persistent vegetative states, forcing medical professionals to ask whether this was an appropriate use of technology.

❑ Should people who are permanently and irreversibly unconscious be kept alive indefinitely?

Question II

❑ A similar issue resulted from the development of neonatal intensive care units (NICUs), which have saved the lives of many premature babies who would have died in earlier decades.

❑ Many of these babies go on to have normal, healthy lives, but many face a lifetime of severe disabilities and serious health complications.

❑ Thus, NICUs raise the question: Ought life to be preserved regardless of the nature or quality of that life?

❑ And if there are times when life should not be preserved, who should be authorized to make these decisions?

✓ The idea of Potter, and in general of bioethics, is that not all that is technically possible is morally right, and that some control of our intervention in nature and the environment, on animals and on human beings, is needed.

✓ The future of life and of humankind is at stake.

i   Human dignity and human rights

ii Benefit and harm

iii Autonomy and individual responsibility

iv Consent

v   Persons without the capacity to consent

vi Respect for human vulnerability and personal integrity

vii Privacy and confidentiality

viii Equality, justice and equity

ix Non-discrimination and non-stigmatization

x   Respect for cultural diversity and pluralism

xi Solidarity and cooperation

xii Social responsibility and health

xiii Sharing of benefits

xiv Protecting future generations

xv Protection of the environment, the biosphere and biodiversity