



MEDICINE AND SURGERY

Course: Professionalism, bioethics and history of medicine

Year: 1st year

Period: annual

Credits: 4

General learning outcomes

Present key discoveries that gave birth and shaped medicine as an art and as a science as we know it today.

Confront which aspects of being a medical doctor had changed, had fortunately or unfortunately been lost through time and which had remained the same over the centuries.

Illustrate the evolution process of Medicine over the centuries and how this has impacted the present concept of medicine.

Describe how technology and engineering have contributed to medical advances.

Discuss how discoveries have moved from empirical observations to methodological research.

Discuss the thinking process that led to a breakthrough in healthcare in history and how this could be applied in present and future challenges.

Discuss how ethical approach and doctor-patients relationship had changed through time. Starting from this analysis improve our understanding the actual scenario and lay the foundations for the improvement of our own ethical and interaction models.

The module of Bioethics deals with the application of ethical theories to problems created, aggravated, or transformed by biomedical and health technologies.

The module focuses on theories and issues at the intersection of medical and biological ethics and ethics of technology and engineering.



The goal is to reflect on the ethical, social, and cultural impact of these technologies and the associated practices: students should apply what they learn through reading and lectures by looking at current events through an ethical lens.

Be aware of the nature of the cognitive knowledge of Medical Professionalism, its attributes, and values and able to identify and reflect on professional and unprofessional behaviours

Be able to discuss the main medical approaches in the healthcare system discussed in medical literature and how they influence doctor-patient relationship.

Discuss the concept of care and caring and have a first contact with the role of other health professionals in patient care

Reflect individually on the issue of death and dying from personal to professional perspective

Prerequisites

None

Contents

- **Introduction to the course (presentation)**

- **History of medicine (lecture): From the beginnings to modern medicine, the role of the doctor**
 - Describe the historical background where the important medical figures in history grew and how their ideas had change history and medicine.
 - Discuss important key discoveries and facts from the past still relevant today.
 - Discuss the links with the past of aspects and traditions in modern medicine.

- **History of medicine (lecture): Evolution of surgery, overcoming the obstacle with science technology and friends.**
 - Describe key breakthrough technological discoveries in surgery.
 - Discuss how technological progress has impacted human life, healthcare systems, and the bilateral relationship between progress and health.
 - Discuss how the advent of new technology and scientific concepts had changed the role of the surgeons and their interaction with colleagues.
 - Understand the change from one-man show to the multidisciplinary approach one of its more stenographic scenario.

- **Bioethics (lecture): Introduction to Bioethics and the concept of values**
 - Introduce students to Bioethics, engineering ethics and digital bioethics, ethical and social issues at the intersection of biomedicine and engineering.



- Introduced to the difference between Ethics and Morality and the concept of moral dilemmas and ethical issues in biomedical research, patient care, and public health.

- **Bioethics (lecture): The concept of Responsibility**

Through specific case-studies students will be introduced to the concept of responsibility

- **General Pedagogy (lecture): Medical Professionalism**

- Identify personal and professional core values in relation to being a medical doctor and compare them to the McGill Framework and the GMC Duties of a Doctor
- Describe the difference among the concept of profession, professionalism, and medical professionalism
- Describe the cognitive base of Medical Professionalism and its historical roots
- Describe the attributes of the Physician as a Healer and as a Professional and give some examples
- Recognize and discuss professional and unprofessional behaviours starting from some clips on medical practice and clinical cases with the help of clinical experts

- **Group work preparatory to the multi-disciplinary workshop**

Students will be split into small groups and reflect on some questions on the topics addressed in the first part of the course.

- **Multi-disciplinary workshop** (History of medicine, Bioethics, and General Pedagogy)

- **History of medicine (lesson): The “Hearth” of evolution, from the adoption of the epidemiology by cardiologist, through the transplant, to the technological birth of interventional cardiology.**

- Understand how a profession can dramatically change his nature through time affected by scientific and technological advancement. Understand the delicate interaction between doctors, specialists, and patients and how it can change through time and technological advancement.

- **General Pedagogy (lecture): Different approaches in Doctor- Patient relationship**

- Retrieve the relationship between doctor-patient relationship and medical professionalism
- Discuss the principal models of doctor-patient’s relationship in medicine and identify their characteristics in some videos (Biomedical model, Bio-Psycho-social Model and Patient-centred Model and Narrative-Based Model)
- Illustrate their characteristics according to the different ways of considering the patient’s body



- Stimulate student's reflection on the patient's illness using a narrative writing and patient centred medical interview.
- **Bioethics (lecture): The concept of Privacy**
 - the issue of "privacy as an individual good" and "privacy as a social good". Students will reflect on some privacy issues in biomedical research, patient care and public health and relevant governance approaches.
- **Bioethics (lecture): The concept of Justice**
 - The lesson will deal with social and distributive justice in public health ethics, discussing fair access, the paradox of health care and global inequality in the digital era.
- **General Pedagogy (lecture): Care and caring in medicine**
 - Present the concept of care and caring starting from Heidegger's Philosophy
 - Present some characteristics of a good care practice
 - Discuss a patient centred care model starting from the experience of nursing and physiotherapy
- **History of medicine (lecture): The evolution of medical knowledge diffusion from oral transmission to "Doctor Google"**
 - Discuss the evolution from the diffusion of medical knowledge.
 - Discuss the peculiar relationship between medical information, society, mass media and public opinion.
 - Discuss the importance of external influence of scientific production through time.
 - Understand how the transformation of the medical knowledge spreading had change the doctor-patients relationship.
- **2nd Multidisciplinary workshop on doctor patient relationship** (History of medicine, Bioethics, and General Pedagogy)
- **A reflection on Death and Dying through Humanities**
 - Reflect on patient's end-of-life experience
 - Reflect on personal values, thoughts, emotions in dealing with the process of care and caring a dying patient
 - Identify professional and unprofessional effective caring behaviour in dying patients
- **General Pedagogy and History of Medicine (presentation)**



- Introducing students to the extended essay

Teaching Methods

Learning/teaching methods

Lectures, seminars involving group activities, essay supervision

Assessment

The final exam consists in writing an extended essay (from a minimum of 1000 to a maximum of 1500 words, references excluded) to be delivered by email by June 21st. This date is to be considered the only date of the exam. Registration of the examination on MyPortal is mandatory. Students will receive the result of their essay on MyPortal on July 15th. The final grade cannot be improved after the final delivery of the essay but can be rejected. In this case Students must resubmit their final essay.

Instructions and assessment criteria

Student will have to choose a module that has particularly interested them from the modules of this course: History of medicine, Bioethics and Pedagogy; identify a research application adhering to the contents dealt with in the course and develop a personal approach to the subject using the appropriate bibliographical references.

The following assessment criteria will be considered:

- Respecting the submission deadline (June 21st).
- Indication of the chosen module that meets the scope of interest (clarify on the paper and on the email)
- Clarity of the research question to be developed.
- The use of the bibliography of the course (mandatory) and other appropriate references. Students may decide to expand the bibliography; however, they must also demonstrate that they have read and included the reference bibliography correctly.
- Presence of a personal reflection on the chosen topic.
- Correct use of quotations in the text.
- Presence of the referred bibliography at the end of the text

Students will be supervised during the writing of their essay. A lecture will be devoted to explaining in detail all the instructions and to offer suggestions for selecting the appropriate topic and work on it. Other meetings (specifically on student's request) will be devoted to the individual supervision during the writing process. The student will contact her/his supervisor directly.

Bibliography

History of Medicine

The Cambridge History of Medicine by Roy Porter 2011



Blood and Guts: A History of Surgery by Richard Hollingham 2016

Deep Medicine: How Artificial Intelligence Can Make Healthcare Human Again

By Eric Topol 2019

Slides and articles provided directly by the Professor on the LMS

Bioethics

Selected parts of:

- A. Campbell (2017), *Bioethics*, Routledge
- I. van de Poel, L. Royakkers (2011), *Ethics, technology, and engineering: An introduction*, Wiley-Blackwell

Scientific papers made available by the Professors.

Pedagogy

Below are some articles used as sources of literature during the lessons. Further sources will be indicated during the lessons and uploaded on the LMS platform.

- EDMUND D. PELLEGRINO, M.D. Professionalism, Profession and the Virtues of the Good Physician, *The Mount Sinai Journal of Medicine* Vol. 69 No. 6 November 2002
- Cruess R.L., S. R. Cruess, "The cognitive base of Professionalism" in Cruess R.L., Cruess S. R., Steinert, Y. *Teaching medical Professionalism*, Cambridge, 2009 – Chapter 1,2,3
- Tsou AY, Creutzfeldt CJ, Gordon JM, "The good Doctor in the 21st century", *Handbook of Clinical Neurology*, 2013, v.118; pp. 119-132
- Cruess R.L., Cruess S.R., Boudreau J.D, Snell L., Steinert Y, *Reframing Medical Education to Support Professional Identity Formation*, *Academic Medicine*, Nov 89(11); pp. 1146-51
- Wynia M.K. et al., More than a list of values and desired behaviours: a foundational understanding of medical professionalism, *Academic Medicine*, 2014; 89: pp. 712-714
- G. E. Engel, The need for a new medical Model. A challenge for Biomedicine, vol. 1999, no 4286, 1977
- William T. Branch, Jr., The Ethics of Caring and Medical Education, *Academic medicine*, vol 75, No. 2 / Febr 2000
- Eklund JH, Meranius MS, Toward a consensus on the nature of empathy: A review of reviews, *Patient Education and Counseling* (2020)
doi: <https://doi.org/10.1016/j.pec.2020.08.022>
- Mills J, Chapman M. Compassion and self-compassion in medicine: Self-care for the caregiver. *AMJ* 2016;9 (5):87–91. <http://dx.doi.org/10.4066/AMJ.2016.2583>