



**BARI ENGLISH MEDICAL CURRICULUM (BEMC)
“HUMAN SCIENCES” (1st year -1st Semester)**

GENERAL PSYCHOLOGY: PROGRAMME

Prof. Giulio Pergola

Syllabus	
Learning Objectives	<i>The course presents the current models of cognition and behaviour and how they map onto brain anatomy and function. The course mentions how the synergistic activity of brain regions gives rise to basic and higher cognitive functions and the related clinical implications.</i>
Course prerequisites	<i>None</i>
Contents	<p>The organization of cognition, affection, and behaviour</p> <ul style="list-style-type: none"> • Cognitive domains • Definition of emotion • The study of behaviour <p>The mind maps onto the brain</p> <ul style="list-style-type: none"> • Principles of the brain functional organization • The pioneering work of Broca, Wernicke, Brodmann, Penfield • “What” & “where” pathways • How the medial temporal lobe supports memory functions • Basic principles of associative and non-associative learning • Emotion processing • Decision-making <p>The use of neuroimaging for psychology studies</p> <ul style="list-style-type: none"> • Computed tomography, PET, and SPECT • Structural, functional, and diffusion magnetic resonance imaging • Electrophysiology, magnetoencephalography <p>Cerebral damage</p> <ul style="list-style-type: none"> • Lesion-symptom mapping: aphasia, unilateral neglect, agnosia, and amnesia • Basic information on Neurodegenerative disorders <p>Neurodevelopment, cognition, and mental health</p> <ul style="list-style-type: none"> • Heritability of mental traits • Intelligence • Basic information on psychiatric disorders
Books and bibliography	<i>Principles of Neuroscience E.R Kandel, J. H. Schwartz, T.M. Jessel</i>

	Cognitive Neuroscience: The Biology of the Mind M. Gazzaniga, R. Ivry, G.R. Mangun
Additional materials	<i>The textbook published by Kandel et al. addresses all topics treated in the course. Any other appropriate textbook may be used, the one by Gazzaniga et al is a concise alternative.</i>

Expected learning outcomes	
Knowledge and understanding on:	<ul style="list-style-type: none"> o Cognition, emotion, and behaviour o Models on brain functioning at the system level o Clinical and psychological correlates of disrupted brain function
Applying knowledge and understanding on:	<ul style="list-style-type: none"> o Students are asked to develop a topic of their choice and discuss a presentation on the topic at the exam -there are not other direct applications of the course topics.
Soft skills	<ul style="list-style-type: none"> • <i>Making informed judgments and choices</i> <ul style="list-style-type: none"> o understanding and discussion of at least one scientific article in English published in peer-reviewed journals. • <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> o Knowledge and correct use of technical language • <i>Capacity to continue learning</i> <ul style="list-style-type: none"> o The course privileges the deepening of specific topics over the superficial knowledge of all the topics in the program.

HISTORY OF MEDICINE AND MEDICAL EDUCATION: PROGRAMME

Prof. Maria Grazia Albano

Course objectives: enable the student to:

- define **Medicine**
- define **the professional competence of the doctor**
- define **Health**
- illustrate **the evolution of the concept of health and disease**
- define **Medical Humanities** and motivate their presence in the Medical Studies Course
- explain **the aims of the study of the History of Medicine and History of the teaching of Medicine**
- define **Therapeutic Patient Education (TPE)**
- define the **therapeutic alliance** (see Bordin 1979)
- cite the **sources of the History of Medicine** (paleontology, historical-literary sources, artistic-archaeological, icodiagnostic evidence)

To enable the student to describe:

The phases of Medicine

- **Ancient Egyptian Medicine** (places of care, diseases, prevention, treatments, doctors)

The training of the doctor in Ancient Egypt

- **Ancient Greek Medicine** (the school of Miletus-Thales, of Pythagoras; Alcmenone of Crotone; Aristotle, Hippocrates)

the symbol of Medicine

the doctor, disease and pain in ancient Greece

The teaching of Medicine in the Greek world

◦ Ancient Roman Medicine (Galen)

The doctor in Roman times, the surgeon, the places of care, the approach to disease and pain
The teaching of Medicine in Rome

◦ Medicine in the Middle Ages

The doctor and health professionals in the Middle Ages, places of care, diseases, disorders of the psychic sphere, the approach to illness, pain, death

The teaching of Medicine in the Middle Ages

The School of Salerno

The birth of Universities (teaching Medicine at the University of Bologna; Taddeo Alderotti, Mondino de 'Liuzzi) and the Colleges

◦ Medicine in the Renaissance (Vesalius, Leonardo da Vinci, Aranzi, Paracelsus)

The Renaissance doctor, diseases, places of care

The teaching of Medicine in the 16th century (Giovanni Battista da Monte)

◦ Medicine in the 17th century (Harvey, Malpighi, Galilei, Santorio, Ramazzini)

The doctor in the 17th century, the Academies, the approach to the disease, the first medical journals

◦ Medicine in the 18th century (Jenner, Lancisi, Lind, Galvani, Morgagni, Brambilla, Bichat, Hunter, Spallanzani)

The doctor in the 18th century, pain, places of care, discoveries (the hypodermic needle, the thermometer, the clinical trials)

The teaching of Medicine in the 18th century (Rasori, Cabanis), the professional College

◦ Medicine in the 19th century (Laennec, Virchow, Bernard, Semmelweis, Fleming, Pasteur, Lister, Koch, Mendel, Golgi)

The pain, the discoveries (surgery: anesthesia and asepsis; aspirin, the syringe, the ophthalmoscope), pharmacology

Women and Medicine in the 19th century (Nightingale, Backwell, Marie Curie), the Matilda effect (eg: Frankline, Meitner, Maric in the 20th century)

Psychiatry and neurology in the 19th century (Pinel, Charcot)

The teaching of Medicine in the 19th century (Murri) - the Galatei

◦ Medicine in the 20th century (Richert and Potier, Fleming, Freud, Pablov)

Discoveries in the different fields of Medicine

Women and Medicine in the 1900s (Cicely Saunders, Rita Charon)

Diseases, therapies, WHO, Doctors Without Borders, the Red Cross, places of care, the NHS in England and the NHS in Italy, the approach to disease and pain, the doctor

Evidence-Based Medicine and Narrative Medicine

Famous doctors, famous sick people

The teaching of Medicine from 1900 to today (Flexner, from Tabella XVIII to today)

◦ Medicine of the future; nanomedicine, telemedicine, robotics, gene therapy, the doctor and the patient of the future

Medical Education in the future.

° *Epidemics over the centuries (define: blaze, endemic, epidemic, pandemic, syndemics; causes of epidemics and modes of transmission)*

* The course presents *hints to Medicine in art* (especially in painting: illness in painting and famous painters who were ill) from different historical periods

Recommended bibliography:

G. Cosmacini, *L' arte lunga. Storia della medicina dall'antichità a oggi*, Laterza, 2011

G. Armocida - B. Zanobio, *Storia della medicina*, Masson, Milano 2002

<http://fr.slideshare.net/trapanimartino/-la-formazione-medica-fino-alla-tabella-xviii>

V. Cagli

<http://fr.slideshare.net/trapanimartino/-la-formazione-medica-fino-dalla-tabella-xviii-ai-nostri-giorni>

F.Dammacco, G. Danieli

BIOETHICS AND MORAL PHILOSOPHY: PROGRAMME

Dr. Raffaello Maria Bellino, M.D., Ph.D.

Topics

Moral Philosophy and General Bioethics.

Code of conduct in arguing. Basic tools for reasoning: deduction and induction, argument, fallacy, validity and soundness, refutation.

A Framework of Moral Norms: Principles, Rules, Rights, Virtues. Conflicting Moral Norms.

Moral theories. Method and moral justification (reflective equilibrium). Moral Dilemmas.

Principlism (Beauchamp-Childress): Respect for Autonomy, Beneficence, Nonmaleficence, Justice

Clinical Ethics.

The Four Topics Method. Ethical Reasoning in Clinical Ethics. Resources in Clinical Ethics.

Medical Indications: Indicated and Nonindicated Interventions. Clinical Judgement and Clinical Uncertainty. Cardiopulmonary Resuscitation and Orders not to Resuscitate. Medical Error. Determination of Death.

Preferences of Patients: Informed Consent. Decisional Capacity. Decision Making for the Mentally Incapacitated Patient. Surrogate Decision Makers. Failure to Cooperate in the Therapeutic Relationship.

Quality of Life: Divergent Evaluations of Quality of Life. Enhancement Medicine. Compromised Quality of Life and Life-Sustaining Interventions. Pain Relief for the Terminally Ill Patients.

Medically Assisted Dying. Suicide. Eubiosia and End of Life Bioethics.

Contextual Features: Health Professions. Other Interested Parties. Confidentiality in Medical Information. Economics of Health Care. Allocation of Scarce Health Resources. Influence of Religion on Clinical Decisions. Role of Law in Clinical Ethics. Clinical Research and Education. Public Health. Organizational Ethics.

Universal Declaration on Bioethics and Human Rights (Barcelona, 1995).

Bibliography

Baggini J and Fosl PS, "The Philosopher's Toolkit: A Compendium of Philosophical Concepts and Methods", Wiley-Blackwell, Oxford 20102.

Beauchamp TL and Childress JF, "Principles of Biomedical Ethics", Oxford University Press, New York 20137, pp. 1-29, pp. 249-301, pp. 351-430.

Bellino F., "Eubiosia and life ending bioethics", excerpt.

Jonsen A.R., Siegler M., Winslade W.J., "Clinical Ethics: A Practical Approach to Ethical Decision Making in Clinical Medicine", McGraw-Hill, New York.

DOCTOR-PATIENT RELATIONSHIP: PROGRAMME

Dr. Pierluigi Selvaggi, MD, PhD

Learning Objectives:

- Understand and apply the principles of doctor-patient relationship
- Understand and evaluate the effects of doctor-patient relationship on treatment outcome
- Evaluate the challenges of therapeutic relationship
- Evaluate and apply in medical settings the principles of human communication
- Evaluate and apply good practices when acquiring informed consent

Course programme:

Lecture #1: Introduction and general principles

Lecture #2: The Therapeutic Relationship

Lecture #3: Principles of Human Communication

Lecture #4: Informed consent

Lecture #5: Interview, physical examination and treatment

Lecture #6: The crisis of patient-doctor relationship

At the end of each lecture a case study will be presented and discussed

References and recommended readings

AMA Principles of Medical Ethics; <https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/principles-of-medical-ethics.pdf> (last accessed April 2022)

General Medical Council, Good medical practice; https://www.gmc-uk.org/-/media/documents/good-medical-practice---english-20200128_pdf-51527435.pdf (last accessed April 2022)

FNOMCeO, Codice deontologico; <https://portale.fnomceo.it/codice-deontologico/> (last accessed April 2022) (*in Italian*)

Michael and John Balint, *The Doctor, His Patient and The Illness* (1957)

Wager TD, Atlas LY. The neuroscience of placebo effects: connecting context, learning and health.

Nat Rev Neurosci. 2015 Jul;16(7):403-18. doi: 10.1038/nrn3976. PMID: 26087681; PMCID:

PMC6013051

Rutherford BR, Roose SP. A model of placebo response in antidepressant clinical trials. Am J

Psychiatry. 2013 Jul;170(7):723-33. doi: 10.1176/appi.ajp.2012.12040474. PMID: 23318413; PMCID:

PMC3628961.

Norcross, J. C. (2010). The therapeutic relationship. In B. L. Duncan, S. D. Miller, B. E. Wampold, & M. A. Hubble (Eds.), *The heart and soul of change: Delivering what works in therapy* (pp. 113–141).

American Psychological Association. <https://doi.org/10.1037/12075-004>

Szasz, T. S., & Hollender, M. H. (1956). The Basic Models of the Doctor-Patient Relationship.

Archives of Internal Medicine, 97, 585-592. <http://dx.doi.org/10.1001/archinte.1956.00250230079008>

What Is Patient-Centered Care? NEJM Catalyst 2017

<https://catalyst.nejm.org/doi/full/10.1056/CAT.17.0559> (last accessed April 2022)

The Embodied Mind: Cognitive Science and Human Experience; Francisco J. Varela (1991)

Nummenmaa L, Glerean E, Hari R, Hietanen JK. Bodily maps of emotions. Proc Natl Acad Sci U S A.

2014 Jan 14;111(2):646-51. doi: 10.1073/pnas.1321664111. Epub 2013 Dec 30. PMID: 24379370;

PMCID: PMC3896150.

Psychological Reactance and Persuasive Health Communication: A Review of the Literature; Tobias Reynolds-Tylus (2019) *Front. Commun.* <https://doi.org/10.3389/fcomm.2019.00056>

Pragmatics of Human Communication A Study of Interactional Patterns, Pathologies, and Paradoxes; Paul Watzlawick, Janet Helmick Beavin, A. B. Doti D. Jackson, (1967)

Oviedo Convention (1997) <https://rm.coe.int/168007cf98>

Consent to treatment (NHS), <https://www.nhs.uk/conditions/consent-to-treatment/> (last accessed April 2022)

Il Consenso Informato in Medicina Applicazioni, disapplicazioni, inapplicazioni, Ercolini (2014) http://www.perelliercolini.it/PDF/consenso_informatico_medicina.pdf (last accessed April 2022) (*in Italian*)

Marvel MK, Epstein RM, Flowers K, Beckman HB. Soliciting the patient's agenda: have we improved? *JAMA*. 1999 Jan 20;281(3):283-7. doi: 10.1001/jama.281.3.283. PMID: 9918487.

Langewitz W, Denz M, Keller A, Kiss A, Rüttimann S, Wössmer B. Spontaneous talking time at start of consultation in outpatient clinic: cohort study. *BMJ*. 2002 Sep 28;325(7366):682-3. doi: 10.1136/bmj.325.7366.682. PMID: 12351359; PMCID: PMC126654.

Greenhalgh T, Hurwitz B. Narrative based Medicine: why study narrative? *BMJ*. 1999 Jan 2;318(7175):48-50. doi: 10.1136/bmj.318.7175.48. PMID: 9872892; PMCID: PMC1114541.

Verghese A. Culture shock--patient as icon, icon as patient. *N Engl J Med*. 2008 Dec 25;359(26):2748-51. doi: 10.1056/NEJMp0807461. PMID: 19109572.

Reilly BM. Physical examination in the care of medical inpatients: an observational study. *Lancet*. 2003 Oct 4;362(9390):1100-5. doi: 10.1016/S0140-6736(03)14464-9. PMID: 14550696.

Medico-Paziente: Un Rapporto in Crisi; Silvia Gregory (2010) https://www.treccani.it/enciclopedia/medico-paziente-un-rapporto-in-crisi_%28XXI-Secolo%29/ (last accessed April 2022) (*in Italian*)

La relazione di cura; Trabucchi (2019) (*in Italian*)

