

CLINICAL METHODOLOGY (MG000019)

1. teaching language

Italian

2. course contents

Coordinator: Prof. MARIA LUISA DI PIETRO

Year Course: 3

Semester: I

UFC: 10

Modules and lecturers:

- BIOETHICS (MG0446) - 2 cfu - ssd MED/43
Prof. Maria Luisa Di Pietro, Dario Sacchini

- EPIDEMIOLOGY (hygiene) (MG0450) - 1 cfu - ssd MED/42
Prof. Angelo Pezzullo, Stefania Boccia

- EVIDENCE BASED MEDICINE (INTERNAL MEDICINE) (MG0451) - 1 cfu - ssd MED/09
Prof. Lorenzo Zileri Dal Verme, Federico Biscetti

- ENGLISH LANGUAGE (MG0394) - 2 cfu - ssd L-LIN/12
Prof. Nicola Francesca Marie Dado', Sammy Faris, Miles Davis, Anna Maria Commodari, Anita Taylor

- General Nursing ScienceS (MG0453) - 1 cfu - ssd MED/45
Prof. Antonello Cocchieri, Elena Cristofori

- General Nursing ScienceS/ PROFESSIONAL TRAINING (MG0461) - 2 cfu - ssd MED/45
Prof. Salvatore Bifano, Elena Cristofori, Anna Rubini, Antonello Cocchieri

- STATISTICS (MG0460) - 1 cfu - ssd MED/01
Prof. Tina Pasciuto, Roberta Pastorino

3. bibliography

Bioethics

Recommended:

Di Pietro ML. Bioetica e Famiglia, Città del Vaticano: Lateran University Press, 2008 (2014, ristampa)

Di Pietro ML. La ricerca per la persona: prospettive bioetiche e algoretiche. In F. Anelli, A. Cesario, M. D'Oria, C. Giuliodori, G. Scambia (eds.), Persona e Medicina, Milano: Franco Angeli, 2021: 269 – 282.

Di Pietro ML., Bucci R. Educazione alla salute. In AA.VV., Igiene, Medicina preventiva e sanità pubblica, Napoli: Idelson Gnocchi, 2021: 309-319.

Jonsen A.R., Siegler M., Winslade W.J., Etica clinica (Edizione italiana a cura di A. G. Spagnolo), McGraw-Hill, Milano 2003

Sgreccia E., Manuale di Bioetica, vol. 1, Vita e Pensiero, Milano 2007.

Epidemiology

Recommended:

Boccia S., De Waure C., Mariani M., Damiani G, Angelillo IF, Pavia M, Villari P Metodologia epidemiologica. In AA.VV., Igiene, Medicina preventiva e sanità pubblica, Napoli: Idelson Gnocchi, 2021: 3-46.

Evidence based Medicine

Recommended:

Pagliari L. Medicina basata sulle evidenze centrata sul paziente. Roma: Pensiero Scientifico ED., 2006.

Straus E, Galsziou P, Richardson WS, Haynes RB. Evidence-based medicine. How to practice and teach it. Churchill Livingstone Elsevier. Fourth Edition, 2011.

English Language

Recommended:

Glendinning/Holmstroem. English in medicine. 3rd ed. Cambridge University Press.

D'Andria Ursoleo J, Galton K. Medical and Scientific English. Pearson.

General Nursing Sciences

Recommended:

Perry A.G., Potter PA. Fondamenti di Infermieristica. Milano: Elsevier, VII ed. 2011.

Lynn P., Manuale di tecniche e procedure infermieristiche, Piccin, Padova III ed. 2016.

Cocco G., Tiberio A. Lo sviluppo delle competenze relazionali in ambito sociosanitario. Milano: Franco Angeli, 2013.

Statistics

Recommended:

Specchia M.L., De Belvis A.G., Pastorino R. Statistica Medica. In AA.VV., Igiene, Medicina preventiva e sanità pubblica, Napoli: Idelson Gnocchi, 2021: 47-82.

4. learning objectives

The first objective of the Course is to help the medical student to develop professional, decision-making, and operational skills also in collaboration with other health professionals.

In achieving this goal, it is essential to be aware that technical-scientific skills must be integrated by the sensitivity to human problems of the suffering person and by ethical-social responsibility in therapeutic action (global education).

This can be achieved through:

1. a critical reflection on the objectives and limits of medicine, identifying the ethical problems of the development of experimental sciences.
2. the acquisition of the logical, epistemological, and ethical foundations governing clinical reasoning and decision.
3. the knowledge of the impact of clinical choices on resource use.
3. learning the tools of medical-scientific research methodology and their application in clinical practice and public health.
4. the acquisition of the theoretical basis of the patient-centred approach and clinical reasoning.
5. the acquisition of the English language

5. prerequisites

It is necessary to comply with the attendance obligations and with any propaedeutic requirements indicated in the Programme Regulations of the degree programme (Humanities exam; The language proficiency exam in English).

For the professional training, prerequisites are:

Suitability of health surveillance

Certification of courses in FAD, pursuant to [Legislative Decree no. 09/04/08 n. 81](#) (hours 4 _ UCSC and hours 12 _FPG).

6. teaching methods

The Course will be carried out through Lectures, Self-learning, Case studies, Group activities.

Teaching includes:

Lectures, that provide knowledge about the main topics of each module through interaction with the teacher and personal study.

Classroom exercises (Case studies, Group activities), that are integrated with frontal lessons to better support students in handling specific clinical issues and improving their communication skills. Managing theoretical knowledge and communication on practical topics will help them in developing the needed critical thinking to continue the course of study.

7. other informationS

Teachers receive by appointment (e-mail request). Students are requested to attend at least 65% for each of the seven Modules. Students can access learning evaluation (oral exam and tests) only if their attendance is consistent with the above threshold.

The teachers of the Nursing module are available on Monday from 13.00 to 14.00 in the offices of the Nursing Degree Course (3 Q) or by appointment.

The following courses are available:

Preconception health in the perspective of public health (Monographic course; Teaching Methods: Lectures; CFU: 1)

Knowledge of fertility: clinical value and help for procreative choices (Monographic course; Teaching Methods: Lectures; CFU: 1)

8. methods for verifying learning and for evaluation

Knowledge will be verified through tests and evaluations during the professional training. In order to obtain the highest score, the student must correctly answer all questions given during tests and have completed professional training with the signature of the teacher that attests to the real attendance.

The vote is expressed in thirtieth. To calculate the final vote the Commission will evaluate the following aspects:

Ability to understand and respond appropriately.

Ability to contextualize the subject of the request in the different clinical care situations

Ability to use acquired knowledge independently.

Communication skills during lectures and classroom exercises

Ability to make a judgment clearly and logically.

The final exam of the English Language course consists of a portfolio containing both the two online projects and a final oral exam.

The portfolio contains:

a written description of the scientific data contained in a graph taken from a recent Scientific article (chosen by the student according to the given criteria)

a recording of a short scientific text (pronunciation)

The students are expected to work on the activities and exercises on Blackboard autonomously before starting the two projects.

Final oral exam:

1) medical abbreviations and acronyms

2) description of the scientific information and data expressed in a graph

3) presentation of two body systems (chosen by the student)

To be admitted to the final oral exam, students must:

meet the attendance requirements.
get their portfolio work approved by their teacher or the online tutor within the given deadline.

9. program

Module 1 (Bioethics). **Research and Clinical Bioethics**

Clinical trials
Genetic Testing
The Care Process
Clinical Bioethics
Health promotion and prevention of disease

Modulo 2 (Epidemiology, Statistics) **Methodology of scientific research**

Definitions of epidemiology, brief history of the field, natural history of diseases, concept of risk. Occurrence measures (prevalence, risks, and rates). Design and analysis of observational epidemiological studies: prevalence studies; geographical and temporal correlation studies (ecological studies); cohort and case-control studies.

Data collection: data and variables; data sources: current data, pathology registries, targeted surveys. Descriptive statistics: frequency, measures of central tendency, measures of dispersion, shape indices. Graphical representations. Probability distributions for continuous and discrete variables. Inferential statistics: the concept of sampling distribution, confidence intervals, the concept of null hypothesis and alternative hypothesis, type I and type II errors, the concept of p-value, Student's t-test, and chi-square test. Practical exercises using open-access software.

Module 3 (Evidence Based Medicine). **Clinical care area**

- Patient approach and doctor-patient relationship
- Patient history; learning to ask clinical questions
- Clinical decision and diagnosis
- Patient-centered empathy in medicine
- Medical error
- Use of scientific literature in medicine
- Guidelines
- Clinical case presentation
- Experimental studies and clinical trials

Module 4 (English Language) **Linguistic area**

The Scientific English course is held in form of “blended learning” both face-to-face in small groups (6 lessons/12 hours) and online (12 hours' worth of autonomous work on the activities and exercises on the online learning platform Blackboard). The students are supported by two tutors (Gerit Berger e Beth Ann Boyle) in their online work.

The module “English Language” consists of 3 parts:

- 1) The hospital, the body parts and body systems (common and scientific terms; focus on correct pronunciation)
- 2) Doctor-patient communication
- 3) Scientific reading

Each part will be covered in both face-to-face classes (communicative abilities) and obligatory online activities.

Module 5 (General Nursing Sciences and Clinical Practice)

Nursing Sciences Area

Communication skills: verbal and no-verbal communication, theories of communications (e.g., Shannon Weaver model) and theories of communication in hospital setting (e.g., King's Theory of goal attainment)

Patient-centered care communication and team building activities.

Patient assessment (functional status, frailty, nutritional screening, pain, risk of falls, risk of skin impairment, health literacy, complexity of care, cognitive impairment...)

- Prevention of the Hospital acquired infections (hand washing, use of PPE, asepsis management during dressings of external devices, surgical wounds, pressure ulcers, positioning of urethral-bladder catheters, and venous sampling for blood cultures)
- Guidelines on Prevention and Control of the Hospital Acquired Infections
- Decreto Legislativo 09/04/08 n. 81

- Antiseptics (types, precautions when using, benefits and disadvantages, safety, and efficacy)
 - Blood sampling (closed systems, needle and syringe, vacuum systems, open systems, choice of gauge)
 - Arterial sampling, venous sampling, finger stick capillary blood
 - In-dwelling venous catheter
 - In-dwelling urethral bladder catheter
 - Central Venous Catheter (CVC)
- Intramuscular injections; Subcutaneous therapy; Intradermic therapy.

Clinical Practice Area

1. The student will participate in the team activities
2. The student will be able to establish an effective and therapeutic relationship with the patient and/or his/her caregiver
3. The student will use critical thinking and decision making (in relation to the ethical code and the EBM principles) during the clinical practice

In particular, he/she should be able to:

participate in the handover process.

participate in the daily briefing.

understand the effective interdisciplinary team dynamics communication.

work on the components of verbal and non-verbal communication, listening, empathy, for a good relationship with the patient.

Apply the effective infection prevention and control measures.

Apply the effective actions for the prevention of Hospital acquired infections (hand washing, use of PPE, asepsis management during dressings of external devices, surgical wounds, pressure ulcers, positioning of urethral-bladder catheters, venous sampling for blood cultures),

Ensure the correct medication administration process verifying the correct prescription, dispensing, and delivering the correct medication by the correct route.

Deliver the injection therapy – intradermic, subcutaneous, and intramuscular.

Insertion of the peripheral venous access (determine the best insertion site, select the appropriate catheter size).

Observe the clinical diagnostic reasoning process (request for tests, execution of the test – capillary refill test, venous, arterial sampling - evaluation of the results).