

## INFERMIERISTICA CLINICA GENERALE ED ELEMENTI DI PATOLOGIA GENERALE (INT005)

### 1. language

Italian.

### 2. course contents

Coordinator: Prof. ANNA RUBINI

Year Course: 1<sup>st</sup>

Semester: 2<sup>nd</sup>

UFC: 9

Modules and lecturers:

- INFERMIERISTICA CLINICA 2 (INT030) - 3 CFU - SSD MED/45 - Prof. Anna Rubini
- INFERMIERISTICA GENERALE 2 (INT032) - 2 CFU - SSD MED/45 - Prof. Anna Marchetti
- PATOLOGIA E FISIOPATOLOGIA GENERALE (INT031) - 4 CFU - SSD MED/04 - Prof. Mariapaola Marino

### 3. BIBLIOGRAPHY

#### General Pathology and Pathophysiology

GM Pontieri "Elementi di Patologia Generale e Fisiopatologia Generale"; Ed. PICCIN

#### General Nursing 2

La Costituzione della Repubblica Italiana

A.A.V.V. Guida all'esercizio professionale Cespi Edizioni Medico Scientifiche 1990 e 1996

L. Benci, Aspetti giuridici della Professione Infermieristica Ed. Mac-Graw Hill

D. Morini, M.C. Russo Manuale di legislazione sanitaria Ed. Rosini Editrice Firenze

L. White, Fondamenti dell'infermieristica, I Vol. Ed. Edises.

R. F. Craven, C. J. Hirnle, Principi fondamentali dell'assistenza infermieristica, I vol., Editrice Ambrosiana

Materiale integrativo fornito dal docente

#### Clinical Nursing 2

P. Lynn, Manuale di tecniche e procedure infermieristiche di Taylor Ed. Piccin, 2010

L. White, Fondamenti dell'infermieristica, I e II Vol. Ed. Edises.

R. F. Craven, C. J. Hirnle, Principi fondamentali dell'assistenza infermieristica, I e II vol., Editrice Ambrosiana

B. Kozier, et Al. Nursing clinico, ed. Edises S. M. Nettina, Il manuale dell'infermiere, I e II vol. Ed. Piccin.

L. Moia, San Camillo e il malato ieri e oggi, ed. Camilliane, 1992

F. Ruffini, San Camillo de Lellis, ed. Velar, 2006

Teaching material provided to students by the Professors of the respective modules (pdf files of the slides used for lectures, scientific articles, supplementary study sources).

It is necessary that the student has, for each module, a reference textbook, to be chosen from those recommended or another text after the teacher's approval.

#### **4. LEARNING OBJECTIVES**

##### **GENERAL OBJECTIVE:**

The overall knowledge of the student must be expressed in the ability to deal with the problems of the assisted person by correlating them with individual human rights and duties deriving from legislation and professional responsibility.

During the course of the Integrated Course, the morphological and functional changes underlying the alterations of the biological balance (homeostasis) and which constitute the basis of diseases will be discussed. In particular, the causes (etiology) responsible for the various diseases, the mechanisms (pathogenesis) with which a disease arises and evolves and the alterations in the normal functioning of different organs and systems affected by the disease will be examined.

The physiological mechanisms of the excretory systems with related excreta characteristics will also be described, as well as the preventive, curative and rehabilitative care procedures affecting the excretory systems; Finally, the main routes of drug administration and the techniques of execution will be described.

##### ***Knowledge and understanding (Dublin 1)***

At the end of the course the student will be able to:

- demonstrate that they have acquired knowledge of the causes of cellular and molecular damage, of the body's reaction mechanisms and of the basic pathological processes that are consequence.
- demonstrate that they have acquired complete knowledge of basic nursing care and that they have acquired the main notions on the vital functions of man, necessary to understand the functioning of the various organs and systems, their regulatory mechanisms and the main processes of integration and homeostatic control.

##### ***Applying knowledge and understanding (Dublin 2)***

At the end of the course the student will be able to:

- demonstrate the ability to use the knowledge acquired to understand how basic disease processes can alter the functions of organs and systems and contribute to the development of a disease.
- apply the knowledge acquired to recognize the needs of the people assisted in various ages and situations and to identify the most appropriate responses with professionalism and competence in the health field.

##### ***Making judgements (Dublin 3)***

At the end of the course the student will be able to:

- know how to integrate the knowledge and skills learned to identify priority problems in relation to functional/dysfunctional health models, using evaluation scales and a complete nursing assessment.
- know how to identify nursing diagnoses on which to design individualized care planning.

##### ***Communication skills (Dublin 4)***

At the end of the course the student will be able to:

- communicate the knowledge acquired about the causes and mechanisms involved in the development of pathological processes and various diseases using an adequate and precise scientific terminology.
- be able to express concepts clearly and be able to correctly and coherently report care planning.

### ***Learning skills (Dublin 5)***

At the end of the course the student will be able to:

- self-assess their skills, expand their knowledge and update themselves by independently drawing on texts, scientific articles and online platforms.

### **SPECIFIC OBJECTIVES**

#### ***Knowledge and understanding (Dublin 1)***

The student will be able to:

- Know the main legislative references relating to general law and the nursing profession, in particular the student must have an adequate preparation with respect to health reform, professional secrecy, the Professional Profile of the nurse (DM 739/94), national and international professional organizations, the Professional Order.
- know the historical figures who contributed to the reform of nursing care, specifically St. Camillus de Lellis and his method in assisting the person with health problems.
- possess the general knowledge of pathology and pathophysiology to assist the healthy or sick person according to the principles of nursing.
- demonstrate that they have understood the organizational structure of the nursing profession in relation to the international one.

#### ***Applying knowledge and understanding (Dublin 2)***

The student will be able to:

- identify the main problems and the related interventions (technical, relational, educational) for the following areas: breathing, nutrition and hydration, urinary and faecal elimination, maintenance of cardiovascular function.
- Use the scientific language of Nursing Diagnoses and the Nursing Process for care planning.
- implement the main nursing procedures on the basis of the relevant scientific evidence.
- identify nursing responsibilities in the management of drug therapy, know the routes and techniques of drug administration.

#### ***Making judgements (Dublin 3)***

The student will be able to:

- interpret the data collected for care planning with the method of the nursing process and identify the main nursing procedures to support the identified problem.

#### ***Communication skills (Dublin 4):***

The student will be able to:

- Manage the dialogue with the patient in order to identify care problems and monitor the patient's health conditions.
- Use scientific language to document the care interventions put in place and encourage interprofessional comparison.

### **Learning skills (Dublin 5)**

The student will be able to:

- Promote one's own learning by seeking confrontation with the teacher and through group interaction and discussion among peers.

### **5. prerequisites**

It is necessary that the student has knowledge of the basic scientific subjects: Anatomy, Physiology, Histology, Physics, Biology, Chemistry and Biochemistry, Genetics; in addition to knowledge of the contents of General Nursing 1 and Clinical Nursing 1.

### **6. TEACHING METHODS**

**Knowledge and understanding (Dublin 1):** The achievement of knowledge and understanding (indicated in the specific training objectives of the course) will be allowed through lectures, the projection of slides and videos and the practical demonstration of nursing techniques and procedures, as well as by the presentation and direct and palpable observation in the classroom of health facilities. Certainly, also through personal study of the texts recommended by the teachers.

**Applying knowledge and understanding (Dublin 2):** The application of knowledge and understanding will be allowed through the presentation by the teachers of practical examples of nursing and medical professional practice, the viewing of audiovisual simulations in the classroom, the analysis of clinical cases and the drafting of a group paper in which students deepen specific ethical-legal-professional topics arising from personal reflection on the contents of the lessons.

**Making judgements (Dublin 3):** The acquisition of autonomy of judgment is allowed through critical reflection on the contents of the lessons, guaranteed by the possibility offered by the teacher of interactive moments and current affairs during which the student participates with questions, clarifications and discussion within the classroom.

**Communication skills (Dublin 4):** The acquisition of communication skills is allowed through interactive lessons, the active participation of the student in the lessons, the comparison and debate with the teacher and fellow students, the oral presentation (individual and group) of a paper concerning topics on the specific nursing profession.

**Learning skills (Dublin 5):** The ability to learn independently and therefore to undertake subsequent studies with a high degree of autonomy is allowed by the student's incentive, by the teacher, to deepen the theoretical contents through reading scientific texts and articles. In particular, through the mandate to create a paper whose theme is chosen from the topics proposed in the general nursing module 2, the student is encouraged to study autonomously and therefore to search for appropriate texts, scientific articles, culture and professional practice updated in the historical moment that society is going through.

### **7. OTHER INFORMATIONS**

The Professors are available for information on the Course and its program, for clarifications on the

lessons, at the end of the lesson and by appointment agreed.

## 8. METHODS FOR VERIFYING LEARNING AND FOR EVALUATION

There is a final oral exam with questions in which the student must describe structures or functions using the correct terminology. For the module of General Nursing 2, the exam is preceded by a written exemption which consists of individual and group in-depth study of specific ethical-legal-professional topics identified with the Professor and documented through the preparation and discussion of term papers in plenary. The qualitative evaluation will be used during the oral exam. The evaluation is aimed at ascertaining the solid and correct knowledge of the contents of the three modules of the Course and the student's ability to explain.

**Knowledge and understanding (Dublin 1):** The achievement of knowledge and understanding is verified and measured through an oral exam with questions related to the program carried out in its three modules and which evaluate the acquisition of the theoretical contents of the course and their understanding.

**Applying knowledge and understanding (Dublin 2):** The ability to apply knowledge and understanding skills is verified and measured through the oral exam by asking the student to apply his/her theoretical knowledge on a problem posed by the teacher within the contents of the three modules.

**Making judgements (Dublin 3):** The acquisition of the student's autonomy of judgment is verified and measured through the oral exam and his ability to identify nursing diagnoses with respect to a health problem in order of priority.

**Communication skills (Dublin 4):** The student's acquisition of communication skills is verified and measured through the use of adequate and precise scientific terminology during the exam and the individual oral presentation (exemption in itinere) of a paper concerning topics on the specific nursing professional.

**Learning skills (Dublin 5):** The student's learning ability is verified and measured through the quality of the paper requested by the teacher of general nursing 2 and presented in itinere. A rich and valid bibliography that goes beyond the contents offered by the teacher, an orderly presentation of the essay, a clear and scientifically correct presentation, even in its aesthetic form, manifests the student's ability to learn independently.

The final grade, expressed in thirtieths, will be the result of the weighted average of the marks reported in the individual modules whose passing requires a minimum grade of 18/30. The student will be able to obtain the maximum grade of 30/30 if the weighted average is at least 29.5/30. To obtain honors, the student must report a grade of 30/30 in the 3 modules of the course.

## 9. program

*Modulo* **INT032 – GENERAL NURSING 2** (Prof. Anna Marchetti)

The methodological approach to the care plan: general logic and characteristic of the Nursing Process; the stages of the diagnostic process; assessment; diagnostic reasoning; diagnostic language; planning: general information and planning of results; Management/implementation; Evaluation; The concept of self-care and the general theory

of nursing by D. Orem

C. Roy's adaptation model, Peplau's interpersonal relationship

The role, responsibility and functions of nursing provided for by the professional profile: the contribution of Nursing Care to the solution of priority health problems; the health of Italians and the objectives of the national health plan; assistance, prevention, rehabilitation, health and therapeutic education activities for priority health problems; care contexts; the Code of Ethics.

Critical thinking: definitions and characteristics; attitudes typical of critical thinking; Functional skills and standards of reasoning.

Clinical-care documentation

National and international nursing associations

### **Modulo INT030 – CLINICAL NURSING 2 (Prof.ssa Anna Rubini)**

Notes on the nursing process: history of nursing, problem solving, decision-making process, the nursing process, data collection, nursing diagnosis, objectives, choice of interventions, final evaluation.

Need to breathe: anatomical-physiological hints on breathing, terms related to breathing, ascertainment of the need to breathe: subjective and objective data, nursing diagnoses, nursing services: patient position, respiratory physiotherapy exercises, oxygen therapy, thoracentesis.

Need to eat and hydrate: terms related to nutrition and hydration, factors that affect nutrition, ascertainment of the need for nutrition: subjective and objective data, nursing diagnosis, nursing services: blood sugar control, hospital dietary service, diets, artificial nutrition (enteral and parenteral), enteral access tools.

Need for urinary elimination: anatomical-physiological hints, terms related to urinary elimination, factors influencing urinary elimination, ascertainment of the need for urinary elimination: subject and objective data, nursing diagnosis, nursing services: bladder catheterization.

Need for intestinal elimination: anatomical-physiological hints, terms related to intestinal elimination, factors that promote intestinal elimination, factors that influence intestinal elimination, ascertainment of the need for intestinal elimination: subjective and objective data, nursing diagnosis, nursing services: use of the frying pan, enema.

Need to maintain cardiovascular function: anatomical-physiological hints, risk factors for cardiovascular problems, ascertainment of the need to maintain cardiovascular function: subjective and objective data, blood pressure measurement, factors affecting blood pressure, physical examination of the peripheral vascular system, nursing diagnoses, nursing services: body temperature detection, blood pressure detection points, body temperature and instruments for detection, electrocardiogram.

Administration of drugs: what is the drug, the 7g rule, medical prescriptions, factors that influence the choice of the route of administration, basic rules for administration, administration of drugs by the oral, sublingual, enteral route (SNG and PEG). Topical drug administration: oral pharyngeal inhalers, use of the nebulizer at calibrated dose, application

and removal of ointments, transdermal injection, ophthalmic drugs, ear drugs, nasal drugs, rectal drugs, vaginal drugs. Drug preparation, the various types of drugs, intradermal injection: technique and sites, subcutaneous injection: technique and sites, insulin therapy, intramuscular injections: Venues, Z-Track technique.

#### Need for spirituality

The figure of St. Camillus and his reform of nursing care.

**Module INT031 GENERAL PATHOLOGY AND PATHOPHYSIOLOGY – (Prof. Mariapaola Marino)**

#### General Pathology Topics:

Introduction to general pathology, concept of health, concept of homeostasis

Morbid phenomenon, morbid process, morbid state, disease, disease classification

Etiology and pathogenesis: Causes of disease: environmental factors (chemical, physical and biological) and intrinsic factors (genetic abnormalities)

Adaptive responses: atrophy, hypertrophy, hyperplasia, metaplasia

Cellular pathology: cell death by necrosis and apoptosis: macroscopic and microscopic aspects, causes and most important mechanisms

Innate and adaptive immune response: cells and molecules of the immune system; role of lymphocytes and effector mechanisms of antibodies; general concepts on vaccinations and seroprophylaxis.

Immunopathology: Hypersensitivity reactions (definition, mechanisms of damage, pathological effects); Autoimmune diseases; Immunodeficiencies: HIV and Acquired Immunodeficiency Syndrome (AIDS).

Immunohematology. Blood groups: antigens and antibodies of blood groups, antigen/antibody reactions of immunohaematological interest, ABO system, Rh system, blood components and indications for use. Blood diseases of immunohaematological interest: haemolytic disease of the newborn. Basic immunohaematological tests: direct and indirect Coombs test.

Acute inflammation: vascular phenomena, exudate, cell recruitment, main chemical mediators of inflammation

Chronic inflammation: chronic non-specific and specific inflammation; chronic inflammation cells; chronic granulomatous inflammation (with particular reference to the etiopathogenesis of tuberculosis)

Systemic effects of inflammation (fever, leukocytosis, acute phase proteins)

Tissue repair (healing and healing of wounds with particular reference to dermal-epidermal wounds)

Classification and epidemiology of human cancers

Molecular basis of the malignant neoplastic process: from dysplasia to the development of the primary malignant tumor, to metastasis

#### Pathophysiology topics:

Pathophysiology of blood: general principles of hematopoiesis, blood count, anemia (definition and pathogenetic mechanisms).

Pathophysiology of water balance: dehydration, overhydration, edema.

Pathophysiology of acid-base balance.

Pathophysiology of the respiratory system: signs and symptoms of respiratory diseases, hypoxia, respiratory failure.

Pathophysiology of the kidney: urinalysis, signs and symptoms of kidney disease, kidney failure.

Pathophysiology of haemostasis and circulation: haemorrhagic disorders, thrombosis, embolism, ischemia, heart attack.

Pathophysiology of blood pressure regulation: hypertension, hypotension, shock

Pathophysiology of the heart: signs and symptoms of heart disease, ventricular hypertrophy, ischemic heart disease, heart failure.

Pathophysiology of the liver: signs and symptoms of liver disease, hepatitis, steatosis, cirrhosis, liver failure, alcohol and liver disease.

Pathophysiology of the endocrine system: endocrine pancreas and diabetes mellitus type I and type II; endocrine dysfunctions.