



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Metodologia Clinica Infermieristica 2

2122-2-I0101D025

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#### Aims

The course aims to provide students with the knowledge of main human diseases and treatments, considering pharmacological and surgical approaches. At the end of the course, students will be able to identify and respond to patients needs in a general surgery setting, using the nursing process. Students will also know: the main classifications of surgical intervention related to complexity, level of urgency and purpose and the different ways of caring in a surgical context; the organization of staff and process in an operating suite; the role and competencies of the primary nurse; the goals and evaluation of health education interventions.

#### Contents

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#### Detailed program

GENERAL SURGERY 1 – Stomach: anatomy and physiology of secretion; gastric ulcer (epidemiology, pathogenesis, HP, clinic, diagnosis, medical and surgical treatment); stress ulcer; malignant neoplasms (histologies, risk factors, classification, TNM, clinical, diagnosis, surgery, oncology and palliative). Esophagus:

diverticula to drive and traction; reflux disease and hiatal hernias; varices; Barrett's esophagus. Malignancies: Colorectal: acute appendicitis (clinical diagnosis, severity, surgical therapy); diverticular disease (etiology, diagnosis, complications, medical and surgical therapy); outline of chronic inflammatory diseases; malignancies (precancerous lesions, histological types, risk factors, classification, TNM, clinics, diagnosis, surgery, oncology and palliative therapies); the ileum and colostomies. Pancreas: mild and severe acute pancreatitis (definition, pathophysiology, clinical, medical and surgical treatment, late complications); chronic pancreatitis (idem). Exocrine neoplasms (epidemiology, histological types, clinics, diagnosis, surgery and its complications). Notes of the endocrine cancers (insulinoma, gastrinoma, glucagonoma). Liver: surgical anatomy; diagnostic instruments (ultrasound, CT, MRI); primary and secondary cancers. Biliary tract: cholelithiasis; cholecystitis; choledocholithiasis. Cholangitis. Anus: digital rectal examination; the symptoms and signs of anal disease; prolapse; hemorrhoids; fissures; abscesses; fistulas; cancer. Hernias: anatomy of the inguinal canal and the spermatic cord; frequent types of hernia (direct and indirect inguinal, femoral, umbilical, congenital); clinical diagnosis; complications of hernias; surgical therapy (front and laparoscopic); notes of the intervention and postoperative complications; incisional hernias. Postoperative complications: wound (dehiscence, hematoma, seroma, infection); risk factors for infectious complications; fever (meaning, causes and types); respiratory complications (atelectasis, pleural effusion, pneumonia, edema, embolism); cardiac complications (hypertension, ischemia / infarction, arrhythmias); renal complications (retention, IRA); gastrointestinal complications (ileus parietic and mechanical compartment syndrome, bleeding, colitis, dehiscence, fistulas, liver failure, colostomies); neurological complications (postoperative delirium).

**CLINICAL PHARMACOLOGY** - General principles and major classes of chemotherapy drugs: antibacterial chemotherapy; inhibitors of cell wall synthesis; protein synthesis inhibitors; folic acid antagonists; inhibitors of nucleic acid synthesis. Chemotherapy, antiviral, antifungal, anti-malarial and anti-tuberculosis. Peripheral nervous system: mediators and their receptors; local anesthetics; curare; anti-inflammatory drugs and analgesics; NSAIDs; central and peripheral analgesic (pain relief, and opioid antagonists); drugs acting on the central nervous system; anxiolytics and hypnotics; neuroleptic antipsychotics; antidepressants; antiepileptics; antiparkinson; general anesthetics; drugs acting on the respiratory system; bronchodilators, antitussive + anti-asthma. Drugs acting on the gastrointestinal system: antacids and anti-ulcer; prokinetics, laxatives, anti-diarrheal; antiemetic and prokinetic; drugs acting on the neuroendocrine system; cortisone; insulin, oral hypoglycemic agents; thyroid; progestogens and testosterone; drugs acting on the cardiovascular system; antihypertensive drugs (central and peripheral, diuretics, ACE inhibitors and ARBs, vasodilators); antianginal drugs (nitrates, calcium channel blockers); antiarrhythmic drugs; drugs for heart failure (digitalis, diuretics); drugs acting on clotting (anticoagulants, thrombolytics, antiplatelet agents, hemostatic); statins; anti-rejection and urgency drugs; anti-rejection drugs; haematological medicines.

**SURGICAL NURSING** - Nursing in the preoperative period; risk assessment and operative infection; education to patient to prevent intra and postoperative complications; decrease of stress and anxiety; suspension from smoking; informed consent; physical preparation for surgery to prevent intra and postoperative complications; intraoperative care; staff organization and technology in an operating suite with attention to nursing role and responsibilities; environmental hygiene; notes of the main surgical instruments; admission of patients, safety in an operating room during induction, prevention of intra and postoperative complications; patient positioning on the operating table; body temperature control; monitoring vital signs (consciousness, breathing, circle); nursing during awakening from anesthesia; evaluation of patient's conditions in postoperative: vital signs, wound dressing, drainage management and pain assessment. Management of nutrition and hydration: the nasogastric tube: placement and management; evaluation of the recovery of intestinal peristalsis; identification of signs and symptoms related to hypovolemic shock, thromboembolism, hypothermia. Features, criteria and nursing responsibilities in relation to discharge patients from the operative context.

**COMMUNITY NURSING** – General basics in health. Definition, origin and development. Health determinants. International and national documents: Declaration of Alma Ata in 1978; Ottawa Charter 1986; Health21 - Health for all in the 21st century, Copenhagen 1999; Declaration of Monaco, June 2000; Health 2020 - A model of european policy in support of cross-action to the government and society to promote health and well-being; National Health Plan and Regional Health Plan; Official guidelines for 2014 (Ministry of Health); Healthcare Agreement for the years 2014-2016, Permanent Conference for relations between the Nation, the Regions and autonomous provinces; Official order n. 4383 of 16.5.2011, CREG evaluation (Chronic Related Group), in execution of the DGR n. 9/1479 of 30.3.2011 (Regione Lombardia). Community health nursing: definition of the nurse role, skills and areas of intervention. Health education process: definitions and goals; planning of an educational intervention.

## Prerequisites

Positive evaluation in these previous examinations: Fundamentals of Nursing and Midwifery Sciences; Nursing Clinical Methodology; Biomedical Sciences 1; Human Physiology.

## Teaching form

Lessons will be provided using the "teledidattica" platform and in attendance, subject to any ministerial changes following the COVID pandemic situation.

Lectures will also consist of presentations in electronic form of drawings and diagrams, exercises. Group work.

## Textbook and teaching resource

Lise M. (2006) Chirurgia per le professioni sanitarie, Piccin; Cella S.G., Di Giulio A.M., Gorio A., Scaglione F. (2010) Farmacologia generale e speciale per le lauree sanitarie, Piccin; Amico-Roxas M., Caputi A.P., Del Tacca M. (2005) Compendio di farmacologia generale e speciale. Torino, UTET Scienze mediche;; Benci L. (2008) Manuale giuridico professionale per l'esercizio del nursing, McGraw-Hill, V ed.; Saiani L., Brugnolli A. (2011) Trattato di Cure Infermieristiche, Casa Editrice Idelson-Gnocchi; Smeltzer S.C., Bare B., Hinkle J.L., Cheever K.H. (2010) Brunner - Suddarth Infermieristica medico-chirurgica – Vol. 1, Casa Editrice Ambrosiana, IV ed.; Centers for Disease Control and Prevention "Linee guida per la prevenzione delle infezioni del sito chirurgico 1999". Giornale Italiano delle Infezioni Ospedaliere 6 (4): 157 – 184; National Collaborating Centre for Women's and Children's Health, National Institute for Health and Clinical Excellence (2008) Surgical site infection: prevention and treatment, RCOG Press. Download from: <https://www.nice.org.uk/guidance/CG74>; Comodo N., Maciocco G. (2011) Igiene e sanità pubblica. Manuale per le professioni sanitarie, Carocci Faber; Auxilia F., Pontello M. (2012) Igiene e sanità Pubblica – Educazione sanitaria, strategie educative e preventive per il paziente e la comunità, Piccin; Mislej M., Paletti F. (2008) L'infermiere di famiglia e di comunità e il diritto di vivere a casa anche quando sembra impossibile..., Maggiolini.

## Semester

First semester

## Assessment method

The written exam will be carried out using the esameonline platform and will consist of open questions with short answers, and multiple choice questions . To pass the examination the student must attain sufficiency in the overall score (?18/30) and in each nursing discipline (Surgical nursing and Community nursing), Pharmacology and Surgery

## Office hours

Request an appointment by email with the professor

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