



UNICAMILLUS

Degree in Medicine and Surgery

Integrated Course: Clinical Semeiotics

Course: General Surgery

SSD: MED/18

Credits: 4

Professor's name: Prof. Celestino Pio Lombardi **e-mail:** celestinopio.lombardi@unicamillus.org

Course: Internal Medicine

SSD: MED/09

Credits: 4

Professor's name:

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Prof. Agavito Tarasi (2 CFU) **e-mail:** agavito.tarasi@unicamillus.org

PREREQUISITES

Even though no prior exams passed are necessary to follow the course, in order to understand the course, the student should have basic knowledge of biology, chemistry, anatomy, physiopathology.

LEARNING OBJECTIVES

Aim of the course is to provide students with knowledge of surgical diseases. In addition, general knowledge on diagnostic approaches is required. Moreover general information concerning surgical approach will be explained. These objectives will be achieved through frontal lectures and interactive teaching activities, designed to facilitate learning and improve the ability to address and solve the main questions of a surgical patient. Student will be asked to recognise main signs and symptoms, diagnostic flow chart, risk and complication of an emergency surgical patient; to describe surgery principles and techniques. Also, the course will provide the student with the necessary skills to perform a proper general clinical examination of the patient; these skills will be acquired through the learning of methodologies 1) of approach to the patient (communication); 2) collection of the previous and next clinical history (history); 3) execution of the general and systematic objective examination in the medical and surgical field.

LEARNING OUTCOMES

Knowledge and understanding

At the end of the course the student should know physiopathology, functional semeiotic and general surgery concerning his scope and expertise. Also, he/she must be able to compile a complete report (problem-oriented or analogous clinical record) containing complete data concerning the patient's clinical history and to perform a general clinical examination of the patient, identifying the alterations relevant to the clinical diagnosis or further diagnostic-therapeutic process to be undertaken.

Communication skills

At the end of the course, the student should know :

- Use specific scientific terminology in an appropriate manner.

Applying knowledge and understanding

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

- To use the acquired knowledge for the autonomous deepening of aspects related to the specific field to which the student will devote himself within the professional activity;

Making judgements

At the end of the course, the student should know:

- carry out general assessments of the topics covered.

Learning skills

- at the end of the integrated teaching, the student will acquire skills useful to deepen and expand their knowledge in the field of the course, also through the consultation of scientific literature, databases, specialized websites.

GENERAL SURGERY SYLLABUS

Neck

Thyroid, parathyroid glands and clinical manifestation. Simple goiter, hyperthyroidism, hypothyroidism, complicated goiter, thyroid cancer. Hyperparathyroidism. The importance of anamnesis and objective exam. Nosological framework. Signs and symptoms. Laboratory tests and instrumental techniques. Clinical and instrumental differential diagnostic orientation. Surgery.

Breast

The importance of anamnesis and objective exam. Identification of a pathological mass. Exploration of the axillary region and other sites of tumor spread. Setting of a correct clinical and instrumental differential diagnostic orientation between malignant and benign pathology. Surgery. Integrated treatments.

Digestive system

Nosological framework of functional and organic diseases: esophagus, stomach, duodenum, jejunum, small intestine, colon, rectum. Setting of a correct diagnostic procedure. Surgery.

Kidney and bladder

Adrenal

Digestive bleeding

Physiopathology and clinical manifestation of superior and inferior gastroenteric tract bleedings. Nosological framework, classification, haematemesis, melaena, enterorrhagia, rectorrhagia, hematochemia, hemobil. Bleeding shock. The importance of anamnesis and objective exam. Sign and symptoms. Laboratory test. Non invasive and invasive instrumental diagnostic techniques. Clinical and instrumental differential diagnostic orientation. Treatment principle.

Liver, gallbladder and biliar duct

Definition and anamnesis of obstructive jaundice. Knowledge of liver and biliar duct topographic anatomy. Differential characteristics and laboratory tests. The importance of objective exam in

malignant and benign diseases. Bloodless and invasive instrumental diagnostic techniques. Surgical treatment principles.

Acute abdomen

Bowel obstruction

Definition and classification of bowel obstruction. Topographic anatomy knowledge of digestive system. How to recognize a bowel obstruction through the anamnesis, the laboratory and the objective exam. Setting of a proper clinical and instrumental differential diagnostic orientation. Principles of surgical treatment.

Peritonitis

Definition of acute abdomen and classification of peritonitis. Topographic anatomy knowledge of intra-abdominal organs. The importance of an immediate diagnosis through the anamnesis, the objective exam and the critical interpretation of laboratory report. Setting of a proper clinical and instrumental differential diagnostic orientation. Principles of surgical treatment.

Shock

Homeostasis, compensation mechanism, nosological setting. Symptoms and objective exams. Functional and instrumental techniques.

Groin

Abdomen hernies and internal hernies. Nosological framework. Classification. Neck, sac and hernial ring. Complications. Nosological framework. The importance of anamnesis and objective exam. Signs and symptoms. Laboratory tests. Non invasive and invasive instrumental diagnostic techniques. Clinical and instrumental differential diagnostic orientation. Surgical treatment principles.

Plevic floor

Physical and instrumental semeiotics of perineum and anal canal. Hemorrhoids, fissures, abscesses, fistulas, anus cancer, rectocele, cystocele, recto-cystocele. Nosological framework. Classification. Complications. The importance of anamnesis and physical examination. Signs and symptoms. Non-invasive and invasive instrumental diagnostic techniques. Clinical and instrumental differential diagnostic orientation. Surgery.

Abscess, phlegmon, wound

Skin and soft tissues. Objective and functional alterations in the presence of lesions and phlogistic and inflammatory phenomena.

Polytrauma

Trauma of the skull, chest and abdomen. Diagnostic timing. Treatment principles.

INTERNAL MEDICINE COURSE SYLLABUS

- Medical anamnesis and its importance in medicine.
- Vital signs and their clinical significance.



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- Physical examination of the main body districts: chest, abdomen, head and neck, skin, limbs and peripheral vascular system, joints, nodes, breast. Neurological examination. Nutritional status evaluation and nutritional markers. Main semeiological signs and manoeuvres.
- How to approach the patient with: head pain, back pain, chest pain, abdominal pain, asthenia, insomnia, alterations of appetite or thirst, alterations of void or diuresis, hematuria, menorrhagia or metrorrhagia, jaundice, diarrhoea, stipsis, nausea, vomiting, regurgitation, hiccup, dysphagia, digestive haemorrhage (hematemesis, melena, hematochezia, rectal bleeding), haemoptysis, cough, dyspnea, palpitations, syncope or lipotimia, arterial hypertension, arterial hypotension, itch, fever, cyanosis, edema, acute mental confusion, coma, persistent vegetative state, vertigo, trauma. How to approach a patient with multimorbidity. Overview on the main neurological signs and symptoms.
- How to interpret the main clinical laboratory tests: blood count, glycemia, uricemia, lipid metabolism, markers of kidney injury and function, sodiemia, potassiemia, calcemia, fosforemia, magnesemia, arterial blood gas analysis, markers of liver function, markers of myocardial damage, haemostasis and coagulation tests, inflammatory indexes, hormones, autoantibodies, standard urine test, 24-hour urinary collection, proteinuria, tests on effusions, fecal analysis, microbiological analyses, principles of transfusion medicine. Acid-base metabolism alterations: metabolic acidosis and alkalosis, respiratory acidosis and alkalosis.
- Semeiotics of the main clinical syndromes in internal medicine: acute myocardial infarction, heart failure, acute pulmonary edema, atrial fibrillation, cardiac valve diseases, pneumonia, pleural effusion, COPD, pneumothorax, acute abdomen, cirrhosis, acute pancreatitis, mechanical and functional ileus, nephrotic syndrome, nephritic syndrome, renal colic, urinary tract infections, sepsis, shock, deep venous thrombosis and acute pulmonary thromboembolism, hypo- and hyperthyroidism, stroke, meningitis.
- Instrumental semeiotics: clinical imaging and functional tests in heart, vascular, respiratory, kidney, gastroenteric, articular and nervous diseases.
- Normal ranges of the main laboratory tests used in clinical practice.
- Knowledge of the basic characteristics of EKG recordings in: healthy subjects, acute myocardial infarction, pulmonary embolism, atrial fibrillation, atrial flutter, ventricular and atrial tachycardia, extrasystolia, atrioventricular blocks, alterations induced by electrolyte imbalances.

COURSE STRUCTURE

The course is structured in 80 hours of frontal teaching, divided into lessons of 2 or 4 hours according to the academic calendar. Frontal teaching includes theoretical lessons and additional seminars on the topics covered.

COURSE GRADE DETERMINATION

Students' skills will be verified with a written exam followed by an eventual oral interview (to improve first judgment).

The following will also be assessed: making judgements, communication skills and learning skills as indicated in the Dublin descriptors.

OPTIONAL ACTIVITIES

In addition to teaching activities, students will be given the opportunity to participate in Seminars, Research Internships, Department Internships and Monographic Courses. The subjects of the activities are not exam subjects.

READING MATERIALS

Title: **Essentials of General Surgery**

Authors: M.D. Lawrence

- DeGowin's Diagnostic Examination, 11e, Publisher: **MCGRAW-HILL** 2020
- Manish Suneja, Joseph F. Szot, Richard F. LeBlond, Donald D. Brown, Dioguardi - Sanna .
Moderni aspetti di semeiotica medica - Segni sintomi e malattie. Editore Seu
- R.Dionigi: Chirurgia, Ed. Elsevier,2017
- Symptom to Diagnosis An Evidence Based Guide, Fourth Edition (4th ed.), Scott D.C. Stern, Adam S. Cifu, Diane Altkorn, McGraw-Hill Education; November 2019
- Handbook of Signs & Symptoms, Autore Andrea Borchers, Argomenti Medicina
Medicina interna Semeiotica medica, Editore Lippincott Williams and Wilkins, 2015
- Symptoms and Diagnosis: A Storytelling Medical Book that May Save Your Life Paperback
– January 19, by Nabin Sapkota MD (Author), MedTale Publishing, Omaha, NE, 2016
- Symptom Analysis For Medical Students 4th/2018, Author : Rema Pai, ISBN :
9789386480293, Publisher : Paras Medical Books, Edition : 4th, Year : 2018
- The Merck Manual of Diagnosis and Therapy, Robert S. Porter, Merck, 2018
- Macleod's Clinical Examination, 14e by J. Alastair Innes BSc PhD FRCP Ed, Anna R Dover
PhD FRCP(Ed), et al. 11 Jun 2018
- Hutchison's Clinical Methods: An Integrated Approach to Clinical Practice, 24e Paperback –
31 May 2017 by Michael Glynn MA MD FRCP FHEA (Editor), William M Drake DM
FRCP (Editor)
- Bates' Guide To Physical Examination and History Taking, 13e by Lynn S Bickley MD
FACP 25 Sep 2020
- Oxford Handbook of Clinical and Laboratory Investigation (Oxford Medical Handbooks)
Flexibound – Illustrated, 15 Feb. 2018 by Drew Provan (Editor)
- Oxford Handbook of Clinical Diagnosis 3e (Flexicover) (Oxford Medical Handbooks)
Flexibound – Illustrated, 18 Sept. 2014 by Huw Llewelyn (Author), Hock Aun Ang
- Harrison's Principles of Internal Medicine, Twentieth Edition (Vol.1 & Vol.2), Autori J.
Larry Jameson, Anthony S. Fauci, Dennis L. Kasper, Stephen L. Hauser, Dan L. Longo,
Joseph Loscalzo, Editore McGraw Hill Higher Education, Pagine 4400, Pubblicazione
2018, ISBN 9781259644030, McGraw Hill
- Lange A. Anamnesi ed esame obiettivo Masson Editore
- Frada' e Frada' Semeiotica medica nell'adulto e nell'anziano Piccin Editore
- Amoroso Costantino Afeltra Picardi Vettore, Semeiotica pratica sussidio multimediale per
l'apprendimento e la verifica delle principali manovre semeiologiche, centro Scientifico
Editore.
- MODERNI ASPETTI DI SEMEIOTICA MEDICA, Dioguardi-Sanna, Società Editrice
Universo



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- METODOLOGIA CLINICA, Nuti-Caniggia, Edizioni Minerva Medica
- Bates' Guide to Physical Examination and History Taking 13th Edition (available also on Amazon in the version for Kindle)
- Macleod's Clinical Examination 13th Edition (available also on Amazon in the version for Kindle)

On line and videos:

- FOAM is a good website – you need to register to see what there is
- <https://www.ficm.ac.uk/free-open-access-medical-education-foamed>
- I like 'life in the fast lane'
- There are thousands of videos mostly on youtube. Type in for example: 'how to examine the chest' and you will get lots of examples eg
- <https://www.youtube.com/watch?v=gRWSyqatWQQ>