



Attachment 1: Course Syllabus Template

Degree Programme in Medicine and Surgery

Academic Year 2026 / 2027

INTEGRATED COURSE (I.C.): Clinical and Systematic Medical Surgical Methodology

NUMBER OF CFU (ECTS credits): 4

SSD (Academic Discipline Code): MED/09, MED/18

COORDINATOR OF THE I.C.: [Luisa Solimando](#)

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MODULE 1: Internal Medicine

NUMBER OF CFU (ECTS credits): 2

SSD (Academic Discipline Code): MED/09

LECTURER: [Luisa Solimando](#)

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MODULE 2: General Surgery

NUMBER OF CFU (ECTS credits): 2

SSD (Academic Discipline Code): MED/18

LECTURER: [Giuseppe Cardillo](#)

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PREREQUISITE COURSES

Not required

PREREQUISITES

Knowledge of anatomy, biochemistry, general physiology, and pathology. Prior knowledge and skills in the following subjects: Human Anatomy I; Human Anatomy II; Physiology and Pathophysiology; Biology and Genetics; Biochemistry and Molecular Biology.

LEARNING OBJECTIVES

Evaluation of the methods used to collect medical history and perform physical examinations of surgical patients. Evaluation of methods (clinical and instrumental) used to generate a diagnosis as an interactive

process including information gathering and hypothesis generation. Data acquisition will begin with the chief complaint, history of present illness, past medical history, and physical examination findings.

EXPECTED LEARNING OUTCOMES

DD 1: Knowledge and understanding

- Identify the possible application of acquired skills in future careers.
- Evaluate the importance of acquired knowledge within the overall medical training process.

DD 2: Applying knowledge and understanding

- Evaluate the physiological principles governing the function of major body systems and alterations induced by functional and structural abnormalities.
- Describe the main signs and symptoms associated with specific clinical disorders and provide adequate explanations of their underlying mechanisms.
- Differentiate between clinical and surgical presentations and explain the distinct approaches required.
- Take a detailed patient history and emphasize the importance of an empathetic and holistic approach.
- Present a thorough explanation of the main diagnostic pathways required to achieve an accurate diagnosis.
- Analyze a clinical case and provide a comprehensive assessment of differential diagnoses.

DD3: Making judgements

- Apply theoretical knowledge to clinical contexts, recognizing general diagnostic aspects of diseases.
- Learn to interpret appropriate laboratory and diagnostic studies.
- Perform an accurate review of systems.
- Learn and execute practical aspects of systemic, clinical, and surgical physical examinations.

DD4: Communication skills

- Present topics orally in an organized and coherent manner.
- Use appropriate scientific language consistent with the subject matter.

DD5: Learning skills

- Evaluate the patient by focusing on findings from medical history, physical examination, and instrumental investigations. Deduce the correct etiological, anatomical, and physiological diagnosis based on these findings.

SYLLABUS

Syllabus MODULE 1:

- History taking and its importance in medicine.
- Vital signs and their clinical significance.
- Physical examination of major body regions: chest, abdomen, head and neck, skin, peripheral vascular system, joints, lymph nodes, breast. Neurological examination.
- Diagnostic approach to patients presenting with headache, back pain, chest pain, abdominal pain, altered bowel habits or diuresis, hematuria, menorrhagia or metrorrhagia, jaundice, diarrhea, constipation, nausea, vomiting, hemoptysis, cough, dyspnea, palpitations, syncope or presyncope, hypertension, hypotension, pruritus, fever, cyanosis, edema, acute confusion, coma, and multimorbidity.
- Interpretation of key laboratory tests: complete blood count, blood glucose, serum uric acid, lipid profile, markers of kidney function and damage, serum electrolytes, arterial blood gas analysis, liver function tests, myocardial injury markers, hemostasis and coagulation tests, inflammatory markers, respiratory acidosis, and alkalosis.
- Semiotics of major clinical syndromes in internal medicine: acute myocardial infarction, heart failure, acute pulmonary edema, valvular heart disease, pneumonia, pleural effusion, COPD, pneumothorax, acute abdomen, cirrhosis, urinary tract infections, sepsis, shock, deep vein thrombosis and acute pulmonary embolism, thyroid function, stroke, meningitis.
- Applications of artificial intelligence in diagnosis and personalized medicine.
- Normal reference ranges of laboratory tests commonly used in clinical practice.

Syllabus MODULE 2:

- Pain in the surgical patient: somatic pain, visceral pain, referred pain. Chest pain.
- Fluid and electrolyte imbalances, acid-base disorders, edema, fever, postoperative fever.
- Recognition of symptoms indicating surgical emergencies: pallor, dyspnea, cyanosis, pain, vomiting, altered consciousness.
- Clinical characteristics of primary and secondary shock.
- Swellings/masses: definition and physical examination.
- Physical examination of the breast and axillary region.
- Acute abdomen: clinical presentation of peritonitis and differential diagnosis. Acute pancreatitis. Ascites. Jaundice and cholestasis. Constipation and diarrhea. Intestinal obstruction: clinical, radiological, and instrumental features.
- Upper and lower gastrointestinal bleeding. Hemoperitoneum: spontaneous and traumatic.
- Physical examination of hernias: examination of the inguinal canal and Scarpa's triangle.
- Voiding disorders: clinical and instrumental features. Hematuria, pyuria, chyluria.
- Introduction to evidence-based surgery.
- Surgical pathophysiology: gastroesophageal reflux disease, gastric and duodenal ulcers, biliary tract pathophysiology, portal hypertension, pathophysiology of bowel obstruction and peritonitis, diverticular disease, and chronic inflammatory bowel diseases.

COURSE STRUCTURE

The course consists of 40 hours of frontal teaching structured into 2- to 4-hour lectures according to the academic calendar. Teaching includes theoretical lectures and case-study seminars supported by PowerPoint slides, PDF/Word files, videos, clinical cases, and quizzes and 2.5 hours of practical activities are provided for each ECTS credit.

COURSE GRADE DETERMINATION

Assessment is based on a written exam followed by an optional oral exam. The test consists of 62 questions in 60 minutes:

- 31 questions for Internal Medicine
- 31 questions for General Surgery
- **Total:** 62 questions (0.5 points per question, maximum score 31 / 30 *cum laude*)

Grading Criteria:

- **Fail (<18):** Significant gaps or inaccuracies in knowledge and understanding; limited analytical skills; frequent generalizations.
- **18–20:** Barely sufficient knowledge and understanding with minor errors; adequate analytical skills and independent judgment.
- **21–23:** Routine knowledge and understanding; correct analytical skills with logical reasoning.
- **24–26:** Fair knowledge and understanding; good analytical skills with rigorous argument presentation.
- **27–29:** Complete knowledge and understanding; strong analytical skills and sound independent judgment.
- **30–30L:** Outstanding knowledge and understanding; exceptional analytical capacity, synthesis, and independent judgment. Arguments presented in an original manner.

OPTIONAL ACTIVITIES

NONE

READING MATERIALS

Macleod's Clinical Examination 14th Edition (available also on Amazon in the version for Kindle) Seidel's Guide to Physical Examination, By Jane W. Ball, RN, DrPH, CPNP, DPNAP, Joyce E. Dains, DrPH, JD, RN, FNP, BC, DPNAP, John A. Flynn, MD, MBA, Barry S. Solomon, MD, MPH Bates' Guide to Physical Examination and History-Taking By Lynn Bickley MD

Clinical Examination: A Systematic Guide to Physical Diagnosis

By Nicholas J. Talley MD PhD FACP FRACP FRCP, Simon O'Connor MBBS FRACP DDU

The Biological Basis of Modern Surgical Practice (Expert Consult Premium Edition – Enhanced Online Features and Print) By Courtney M. Townsend, Jr., MD, R. Daniel Beauchamp, MD, B. Mark

Evers, MD and Kenneth L. Mattox

