

**Degree in Medicine and Surgery**

Teaching: **Clinical Practice V Year**

Total CFU : **20**

SDS	TEACHING MODULE	CFU
MED/40	Clinical Practice of Obstetrics and Gynaecology	2
MED/25	Clinical Practice of Psychiatry	1
MED/38	Clinical Practice of General and Specialist Paediatrics	2
MED/20	Methods in Pediatric Surgery	1
MED/39	Clinical Practice of Child Neuropsychiatry	1
MED/26	Clinical Practice of Neurology	2
MED/33	Clinical Practice of Diseases of Musculoskeletal System	1
MED/30	Clinical Practice of Eye Diseases	2
MED/31	Clinical Practice of Otolaryngology	2
MED/27	Neurosurgery	1
MED/18	Methods in General Surgery	2
MED/35	Clinical Practice of Cutaneous and Venereal Diseases	1
MED/19	Methods in Plastic Surgery	1
MED/36	Clinical Practice of Diagnostic Imaging and Radiotherapy	1

**LEARNING OBJECTIVES**

**Medical Practice Activities:** The student will participate in all clinical activities of the assigned ward; in the last period the student will be directly involved in the management of a patient from admission to discharge:



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Welcoming the patient to the ward, informing the patient and obtaining consent for the diagnostic and therapeutic pathway, correctly compiling the medical record (history, objective examination and per diem), setting up the differential diagnostic pathway, communicating the diagnosis and prognosis to the patient and family members, setting up the therapeutic plan and knowing the risk of drug interactions, participating in the epicrisis and writing the discharge letter and, if possible, participating in the writing of an Acceptance Discharge Report (RAD) and understanding its meaning.

***Surgical Practice Activities:*** The student will participate in all clinical activities of the assigned ward; in the last period the student will be directly involved in the management of a patient, from admission to discharge: welcoming the patient to the ward, correctly compiling the medical record (history, objective examination and per diem), establishing the diagnostic pathway, informing the patient and obtaining consent for the diagnostic and therapeutic pathway, participating in the epicrisis and the writing of the discharge letter and, if possible, participating in the writing of a Discharge Acceptance Report (DAR), understanding its meaning. The objectives include: knowing how to apply a sterile field dressing, how to apply and remove sutures, attending at least one surgery.

## **LEARNING OUTCOMES**

### **Knowledge and understanding**

Knowledge of the total patient approach. Acquire the medical skills necessary for clinical decision making.

Demonstrate knowledge of therapeutic approaches.

### **Applying knowledge and understanding**

Recognise and critically interpret the main pathologies, using both physical semeiotics and laboratory and instrumental diagnostic tools to complete the information obtained from the anamnesis and the objective picture.

To interpret, from a pathophysiological point of view, the symptoms, clinical signs and laboratory and instrumental findings of individual clinical cases and to establish the clinical-diagnostic reasoning leading to the diagnosis and therapeutic measures.

To be able to formulate a differential diagnosis based on specific clinical data and to justify it with coherent arguments.

Know the practical aspects of diagnostic instruments, when to use them and how to use them.

### **Autonomy of judgement**

Recognise the importance of thorough subject knowledge consistent with good medical education. Recognise the fundamental role of correct theoretical knowledge in clinical practice.

### **Communication skills**



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Explain arguments orally in an organised and coherent way. Use academic language that is appropriate and consistent with the topic of discussion.

### **Learning skills**

Recognize the possible applications of recognized skills in future careers. Assess the importance of knowledge acquired in the general process of medical education.

### **PREREQUISITES**

Knowledge of Microbiology, Physiology, Systematic Pathology, Internal Medicine and General Surgery.

### **COURSE SYLLABUS**

#### **Surgical Practice Activities**

The student will participate in all clinical activities of the assigned ward; in the final period the student will be directly involved in the management of a patient from admission to discharge: Welcoming the patient to the ward, correctly completing the medical record (history, objective examination and per diem), establishing the diagnostic pathway, informing the patient and obtaining consent for the diagnostic and therapeutic pathway, participating in the epicrisis and in the writing of the discharge letter and, if possible, participating in the writing of the Discharge Acceptance Report (DAR) and understanding its meaning. The objectives include: being able to apply dressings in a sterile field, to apply and remove sutures, to attend at least one surgery.

The skills demonstrated in these activities will form the basis of the final assessment.

#### **Medical Practice Activities:**

- Welcome the patient in the ward, inform the patient and obtain consent for the diagnostic and therapeutic path.
- Fill in the medical record, history, physical examination and daily.
- Set the differential diagnostic path.
- Know the importance of comorbidities.
- Prescribe the therapy and know the risk of drug interactions.
- Communicate the diagnosis and prognosis to the patient and family members.
- Make the epicrisis and discharge letter.
- Complete a Discharge Acceptance Report (RAD) and understand its meaning.

#### **Clinical Practice in Gynecology-Obstetrics**

- Assistance in obstetrics diagnostic techniques: non-invasive (obstetric ultrasound, nuchal translucency, bitest) and invasive in obstetrics (amniocentesis, cordocentesis, villocentesis etc).
- Clinical cases of patients with pregnancy at risk (gestational diabetes, preeclampsia, hepatitis, etc.).
- Evaluation of patients in labor.
- Vaginal delivery assistance.
- Delivery assistance by cesarean section.



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- Evaluation of postpartum patients.
- Assistance to pap-test and colposcopy surgeries.
- Gynecological ultrasound.
- Evaluation of gynecological patients (clinical cases of benign and oncologic gynaecology).
- Assistance in benign gynecology and/or oncology surgeries.
- Postoperative patient care in gynecology.
- Obstetric and gynecological emergency assistance.

### **Clinical Practice of Psychiatry**

- Use of psychopathological terms commonly used in psychiatry.
- Identification of the main psychiatric signs and symptoms in individual patients and perform the psychological examination.
- Evaluation of psychometric and projective test results.
- Compilation of the psychiatric medical record.
- Criteria for the TSO, completion of the relevant form and knowledge of application practice.
- Knowledge of the classes of most commonly used drugs.

### **Clinical Practice Activities in Pediatrics**

- Collect a complete personal, family, obstetric (maternal, perinatal and neonatal) history, draw up a genealogical tree.
- To record the main auxological parameters (weight, length/height, cranial circumference) and use the auxometric maps for the assessment of the general and district somatic development.
- To detect and interpret vital parameters and know the range of normality in the newborn and in the child (heart rate, respiratory rate, blood pressure).
- Perform an examination of the newborn and child: assessment of the heart and respiratory system, evaluation of hypochondriac organs and explorable lymph node stations, otoscopy.
- Collect data on the feeding history, and data related to the neuro-motor, cognitive and relational development of the child.
- Perform a venous and arterial blood sample in different pediatric ages; encircling a peripheral vein; obtain a sterile urine sample for urine culture; perform PBLs maneuvers; monitor the input/output balances and calculate diuresis.
- Be able to interpret the results of the most common laboratory tests (reading and interpretation of the blood count with formula, of the stix and urine test, of the culture tests and antibiogram of blood, urine, CSF, faeces in various age groups) By relating them to the physiological changes of parameters observed in neonatal and developmental age.
- Be able to read the Medical File and fill out under the guidance of the Doctor of the Structure: the Clinical File - a request for specialist advice - a request for instrumental examination (histological, cytological, radiological, etc.).
- Diagnostic and therapeutic approach to the child with fever, acute asthma, dehydration, head trauma.



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- Application of specific therapeutic indications, contraindications, dosage and the main routes of administration of the most frequently used drugs in pediatric patients (rehydrating solutions, antibiotics, corticosteroids, antihistamines, antipyretics, painkillers etc.).

### **Methods in Pediatric Surgery**

- Acquisition of basic knowledge on diseases of surgical interest, their management and long-term clinical control.
- Know the main pediatric pathologies that require surgery; know the main surgical techniques of pediatric scope and the related risks; know the procedures of preparation of the child to surgery; know the sequela of pediatric surgery.
- Participation in clinical case meetings and discussions; attendance at the divisional clinic for diagnosis and management of patients with surgical pathology; management of therapies.
- Operating room: surgical preparation (sterile dressing), approach to the surgical patient and knowledge of threads and suturing techniques.
- Basic knowledge of the importance of D.R.G.(diagnosis related group) of surgical pathologies, basic concept of clinical risk and importance of informed consent.

### **Clinical Practice of Pediatric Neuropsychiatry**

- Collect information and prepare a specific and detailed neuropsychiatric anamnesis in childhood, childhood and adolescence.
- Perform a proper neurological examination in childhood.
- Perform a proper neuropsychological (cognitive functioning, executive functions etc.), adaptive, emotional, affective, behavioral and social evaluation using clinical interviews, clinical observations and standardized tools.
- Identify clinical signs/symptoms that are useful to guide decisions on genetic testing and neuroimaging.
- Collect clinical signs/symptoms in neurodevelopmental, psychiatric and neurological disorders, perform an adequate diagnosis and use correctly the diagnostic classification systems (ICD, ICF and DSM).
- Apply their knowledge, understanding and problem solving skills in clinical and rehabilitation environments within a broader (or multidisciplinary) context related to the discipline.
- Integrate knowledge and manage complexity by making judgments with incomplete or limited information.
- Apply basic skills in the area of observation, clinical interview and clinical reporting.
- Start applying specialist skills to provide patients with evidence-based treatment (pharmacologic and rehabilitative).
- Learn to communicate your judgments (and the knowledge and logic behind those judgements) in a clear and unambiguous way to a medical and non-medical audience

### **Clinical Practice of Neurology**



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- The Triage of the patient with cerebral stroke ;
- Biomarkers in neurodegenerative diseases: recessive execution ; evaluation of immediate and late responses (amyloid, tau-proteins); comparison with plasma biomarker testing (NFL);
  - Modern diagnostics with neuroimaging ; excursus on contribution of Nuclear Medicine and NMR at 3 tesla (as well as rudiments on functional c.d. NMR);
  - New therapeutic frontiers, with particular emphasis on biological immunotherapies and rare diseases;
  - Semi-eotics at the patient's bed, with examination of medical, specialist and nursing roles; also, changes in clinical scores during hospitalization;
  - Awareness of the parameters used both in the reception by the First Aid his in the transfer of patients not independent (NIHSS ; Rankin ; Barthel ; GCS ; ASIA ; TOAST; plus art 56 & 75 ).

### **Clinical Practice of Neurosurgery**

- History, neurological objectivity and initial general profile of the patient suffering from neurosurgical pathology.
- Management of the patient with acute, time-dependent pathology, with treatment urgency.
- Management of the patient with elective or chronic disease, which does not require urgent treatment.
- Knowledge of the evolution of clinical pictures: the rapid neurological deterioration.
- Knowledge of the diagnostic process: elements of neuroradiology, principles of invasive diagnostics, use of monitoring.
- The neurosurgical operating room: the concept of sterility, the approach to micro-surgery, pre- intra- and post-operative technology, image-guided surgery.
- Post-operative complications.
- Ethical and medico-legal considerations: iatrogenic brain and spinal cord damage; therapeutic zeal; resilience.

### **Clinical Practice of Locomotor Diseases**

- Know how to collect the patient's accurate history to identify possible causes of reported symptoms and temporal links.
  - To be able to perform a thorough physical examination by referring to specific diagnostic tests and interpreting them in the light of detailed knowledge of anatomy, physiology and pathophysiology.
    - Know how to interpret functional deficits and painful sites in order to arrive at a correct diagnosis.
      - Identify the most essential, useful and meaningful imaging and supporting tests to confirm a diagnostic suspicion.
        - Identify the correct treatment in light of the factors determining the choice:
          - Age of patient.
          - Co-morbidities are present.
          - Patient compliance for that specific treatment.



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- Possible complications.
- Assessment of the pathologies associated with orthopaedic in that specific event.
- Ability to manage patients at risk or in danger of life.

### **Clinical Practice of Visual Diseases**

The student must have seen:

- Objective ophthalmological examination
- Examination of visual acuity
- Prescription of lenses
- Tonometry
- Examination of the fundus oculi and interpretation of the main findings
- Campimetry
- Conjunctivitis semeiologic
- Cataract disease
- Glaucoma disease
- Lacrimal pathway semeiologic

### **Methods in General Surgery**

Learn how to communicate and interact with patients and staff.

Improve some technical aspects of the Medical - Patient Interview (manage the relationship, developing your basic skills).

- Exposure to the most common adult surgical conditions.
- Conducting a thorough physical examination and obtaining a well-structured anamnesis.
- Perform a comprehensive physical examination specific to the organ and system concerned.
- Explore the therapeutic diagnostic path of surgical pathologies in emergency.
- Explore the therapeutic diagnostic path of pathologies in surgery choice.
- Explain the indications for the most common investigations and know how to analyze the results.
- Present a clinical case, choosing the most relevant anamnestic news, signs and symptoms for the hospitalization in question and discuss any differential diagnoses.
- Interpret the results of common diagnostic tests such as: chest and abdomen Rx, blood gastric analysis, routine biological examinations, CT abdomen.
- Surgical therapy, with frequency of the operating room.
- Perform simple technical maneuvers such as: measure the frequency and blood pressure; make ECG and venous collection; remove stitches and make dressing surgical and non-surgical wound.

### **Clinical Practice of Skin and Venereal Diseases**

- Collection of family and personal anamnesis for diagnostic framing.
- Clinical examination of the dermatological patient with classification and description of the lesions found.





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- Clinical and dermatoscopic examination of subjects with multiple pigmented lesions.
- Performing video-dermatoscopy of pigmented lesions, suspected neoplasms and skin precancerous.
  - Analysis of the images acquired. Discussion on the characteristics found.
  - Clinical examination of patients with desquamative erythema manifestations and discussion of possible diagnoses and therapies.
  - Clinical examination of patients with eczematous manifestations and discussion of possible diagnoses and therapies.
  - Clinical examination of patients with exanthema manifestations and discussion of possible diagnoses and therapies.
  - Skin biopsy: purpose and method of execution.
  - How to perform local anaesthesia.
  - Cryotherapy of skin lesions.
  - Diathermy of skin lesion.
  - Clinical examination of patients with sexually transmitted disease.
  - Analysis and description of lesions. Discussion on possible diagnosis and treatment

### **Methods in Plastic Surgery**

- Reception, anamnesis, objective examination of the patient.
- Clinical evaluation of the patient, discussion of the clinical journal and the daily therapeutic postoperative card, evaluation of preoperative examinations, drawings and measurements.
  - Participation in the surgery session of major surgery (interventions under the regime of Ordinary Hospitalization and Day Hospital).
  - Participation in the surgery session of outpatient surgery.
  - Participation in plastic surgery: first visits, post-operative checks surgical wound dressings, removal of sutures).
  - Participation in Multidisciplinary Meetings.
  - Participation in specific outpatient clinics (post-Bariatric, ulcer, breast reconstruction surgery, skin tumors).

### **Clinical Practice of Diagnostic Imaging and Radiotherapy**

- Techniques and methods of study in the Diagnostic Imaging in the main pathological alterations of organs and systems.
  - Criteria for the selection and progressive ordering of radiological examinations in diagnostic problems.
  - Knowledge of: Radiotherapy treatment - Indications for radiation therapy in the main neoplasms .
    - Acute and late toxicity of radiotherapy treatment.
    - Equipment for the administration of radiotherapy.
    - Technical aspects related to the different types of radiotherapy treatments (3D-CRT, IMRT, IGRT, IORT, Radiosurgery and Stereotactic Radiotherapy, Hadrotherapy, Brachytherapy and volumes of radiotherapeutic interest (GTV-CTV-PTV) in radiotherapeutic planning.



## **COURSE STRUCTURE**

The course includes attendance in the laboratory, classroom, multimedia seminars, etc. Attendance is compulsory.

## **COURSE GRADE DETERMINATION**

At the end of the course, the student will be assessed by a written test on the knowledge acquired. The final assessment will be expressed as 'idoneo' (qualified) on the basis of the following criteria:

Non Idoneo (Unqualified): significant deficiencies and/or inaccuracies in the knowledge and understanding of the topics in relation to the practical activity carried out; limited ability to analyse and synthesise, frequent generalisations.

Idoneo (Qualified): Routine knowledge and understanding of the field;

Correct capacity for analysis and synthesis with coherent logical argumentation in relation to the practical activity carried out.

Moderate knowledge and understanding of the subject matter; good ability to analyse and synthesise rigorously reasoned arguments in relation to the practical work undertaken.

Broad knowledge and understanding of the subject matter; considerable ability to analyse and synthesise in relation to the practical work undertaken.

Good autonomy of judgement.

Excellent knowledge and understanding of the subject in relation to the practical work undertaken.

Remarkable ability to analyse, synthesise and exercise independent judgement.

Arguments expressed in an original way in relation to the practical activity undertaken.

## **READING MATERIALS**

No specific texts are required.