COURSE OF STUDY: *MEDICINA E CHIRURGIA*
ACADEMIC YEAR *2024-2025*
INTEGRATED COURSE: *CLINICAL METHODOLOGY*
ACADEMIC SUBJECT:

- *MEDICAL SEMIOTICS (3CFU) - - -*
- *SURGICAL SEMIOTICS (3CFU)*
- *ELEMENTS OF EMERGENCIES AND FIRST AID (1CFU)*
- *JOINT SEMIOLOGY (1CFU)*

CANALE AK

General information	
Year of the course	*II YEAR*
Academic calendar (starting and ending date)	*SECOND SEMESTER*
Credits (CFU/ETCS):	*Six credits*
SSD	*MEDICAL SEMIOTICS (Med/09)* *SURGICAL SEMIOTICS (MED/18)*
Language	*Italian*
Mode of attendance	*In Presence, mandatory*

Professor/ Lecturer	
Name and Surname	*Francesco Tandoi (Coordinator)* *Michele Vacca* *Antonio Giovanni Solimando*
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Telephone	*/*
Department and address	*/*
Virtual room	*/*
Office Hours (and modalities: e.g., by appointment, online, etc.)	*By appointment (to agree with the teacher via email)*

Work schedule			
Hours			
Totals	Lectures	Hands-on (laboratory, workshops, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
150	*48*	*24*	*78*
CFU/ETCS			
6	*4*	*2*	*0*

Learning Objectives	Provide knowledge necessary to correctly apply the appropriate methodologies.

	To detect clinical, functional and laboratory findings, interpreting them for pathophysiological, diagnostic, and prognostic criteria. Knowledge of clinical methodology, medical and surgical semiotics.
Course prerequisites	There are no specific prerequisites different from those required by the teaching regulations in terms of propaedeutics (Anatomy 1 and 2). To adequately address the contents of the course, preliminary knowledge of physiology and the principles of evidence-based medicine are recommended.

Teaching strategies	Frontal teaching; professionalizing activities (practical sessions even at the patient's bedside); simulation/discussion of clinical cases.

Expected learning outcomes in terms of **Knowledge and understanding on: (Dublin descriptor 1)**	**Dublin Descriptor 1: Knowledge and understanding.** The frontal teaching is aimed at acquiring the skills for compiling the clinical record and diary: • Collect the medical history correctly. • Perform physical examination. • Provide the principles of instrumental semiotics. • Interpret biological functions based on symptoms/signs. During the course, practical tests may be conducted at the patient's bedside. At the end of the course the student should be able to: • Collect medical history data correctly. • Perform a general physical examination. • Perform a physical examination of the various organs and systems (normal and pathological conditions).
Applying knowledge and understanding on: (Dublin descriptor 2)	**Dublin Descriptor 2: Ability to apply knowledge and understanding.** The teaching activities will aim at acquiring the following skills: • Interpret biological functions and symptoms/signs. • Correlate clinical data with pathophysiological notions (principles of medical and surgical pathophysiology). At the end of the course the student should be able to: • Accurately fill out a "problems-oriented" medical record: ▪ Collecting an accurate medical history. ▪ Performing a general and specific physical examination for organs and systems. • Interpret common instrumental tests of internal and surgical relevance.
Soft skills (Dublin descriptor 3-5)	**Dublin 3 descriptor: critical and judgment skills.** Students should gain the ability to collect and interpret clinical data to demonstrate: • Critical ability and independent judgment in interpreting the patient's symptoms and signs (simulated clinical cases) to formulate diagnostic hypotheses, and an appropriate diagnostic plan for the patient.

	At the end of the course the students should be able to: • Formulate diagnostic hypotheses based on critical thinking based on medical history and physical examination. • Set up a diagnostic plan based on the diagnostic hypotheses. **Dublin 4 descriptor: ability to communicate learned topics.** The students should acquire: • Communication skills with specialist and non-specialist interlocutors. At the end of the course the student should be able to: • Argue using specific nomenclature (competence in the use of specialist vocabulary), or simple (but sufficiently appropriate) nomenclature in communicating with patients and relatives. **Dublin 5 descriptor: ability to continue studying independently throughout life.** The students should acquire: • Ability to learn independently. At the end of the course, the students should be able of continuing professional development independently: • Searching the scientific literature. • Being able to critically read a scientific article. • By consulting the Guidelines, the regional/national Notes, the Diagnostic and Therapeutic Paths (PDTA) of the hospitals, the drug information leaflets.
Content knowledge	**The course is organised into frontal teaching with cognitive objectives, and interactive teaching with theoretical-practical lessons in small groups (AFP = professional training activity). The program structure is the following:** **<u>PATHOPHYSIOLOGY AND MEDICAL SEMEIOTICS</u>** **GENERAL EXAM** Medical history: • Familial • Physiological • Remote pathological • Proximal pathological • Voluptuary and food habits • Pharmacological • Allergies Physical examination: • Facies • Decubitus, Posture, standing, and walking • Level of consciousness • Body temperature • Breathing • Cardiac activity • Arterial pulse • Blood pressure • Constitutional type and somatic conformation • State of nutrition, hydration, • electrolyte and acid balance -base • psyche and sensorium • Sleep • Psyche and sensorium • degree of sexual differentiation • state of blood **INTEGUMENTARY SYSTEM -**Medical history and physical examination • Skin: colour and state • Oedema • Skin pigmentation • Jaundice • cyanosis • Skin secretions • Explorable mucous membranes • Skin appendages • Subcutaneous • Itching • Sweating **LYMPHATIC SYSTEM -**Medical history and physical examination • Lymph nodes • Vessels • Relationships with other circulations

	MUSCULOSKELETAL SYSTEM - Medical history and physical examination • Head • Neck • Spine • Shoulder • Arm and forearm • Hand • Trunk • Hip • Thigh and leg • Foot •Joint stiffness • Arthralgia • Joint swelling • Muscle strength and exhaustion • Myalgia • Fasciculations • Muscle cramps • Tetany **RESPIRATORY SYSTEM -** Medical history and physical examination • Nose • Nasal secretions • Epistaxis • Paranasal sinuses • Larynx • Trachea • Physical examination of the chest (breathing characteristics, physical semiotics of the chest, functional exploration of breathing) • Dyspnoea • Orthopnoea • Tachypnoea/bradypnea • Apnoea/apneusis • Noisy breathing • Pharyngeal pain • Cough • Haemoptysis • Introduction on the semiotics of the main pathologies of the respiratory system **CIRCULATORY SYSTEM -** Medical history and physical examination • Peripheral pulses • Carotid bruit • Jugular pulsation/turgor • Abdominal aorta pulsation and bruit • Lower limb varicose veins • Collateral venous circulation • haemorrhages **CARDIOVASCULAR SYSTEM -** Medical history and physical examination • Inspection and palpation of the precordial region (Cardiac dimensions) • Percussion of the heart and great vessels • Auscultation of the heart (Heart rate; Heart tones; Clicks; Systolic/diastolic/continuous murmurs; pericardial rubs) • Thoracic pulsations • Precordial thrills • Sense of heaviness/retrosternal constriction • Precordial Pain • Syncope • Dyspnoea • Orthopnoea/paroxysmal nocturnal dyspnoea • Cyanosis • Haemoptysis • Asthenia • Sense of heaviness in the lower limbs • Intermittent claudication • Pain • Skin changes • Lymphedema • Embolism **DIGESTIVE SYSTEM -** Medical history and physical examination Oral cavity • Breath • Salivary glands • Physical examination of the abdomen (general and physical semiotics of the abdomen) • Treatability • Abdominal tenderness • Umbilical scar • Abdominal masses • Hernias • Ascitic effusion • Liver • Spleen • Inguinal canal • Rectum • Xerostomia • Sialorrhea • Bad breath • Nausea/vomiting • Belching/meteorism/flatulence • Hematemesis • Dysphagia • Odynophagia • Dyspepsia • Heartburn • Epigastric pain • Bowel disorders • Tenesmus • Melena • Rectal bleeding **URINARY SYSTEM -** Medical history and physical examination • Physical and functional semiotics of the kidney and urinary tract • Renal and ureteral landmarks • Bladder • Polyuria • Pollakiuria • Dysuria • Oligo-anuria • Nocturia • Enuresis • Haematuria • Tenesmus and incontinence • Urinary dyschromia and examination of urine **ENDOCRINE SYSTEM -** Medical history and physical examination • Thyroid • Adrenal • Pituitary • Parathyroid • Endocrine pancreas • Testis • Ovary • Polydipsia/polyuria • Hirsutism/hypertrichosis **NERVOUS SYSTEM -** Medical history and physical examination • Trigeminal • Facial • Glossopharyngeal • Vagus • Accessory • Hypoglossal • Alterations of deep and superficial reflexes • Muscle tone and strength • Paresis • Paralysis • Posture • Gait • Cerebellar functions • Involuntary movements • Meningism • Headache • Syncope • Cloudiness of the sensorium and coma • Neuralgia • Tremors

	<u>PATHOPHYSIOLOGY AND SURGICAL SEMEIOTICS</u> **The medical history** **General physical examination of the surgical patient and operated patient** **Alterations of the digestive and urinary function:** alterations of digestive transit, basic clinical anatomy, pain in the main acute abdominal syndromes. **The local objective examination** of swelling, continuous solutions, neck and head, chest, abdomen and genitals, limbs. **General clinical and instrumental semiotics of diaphragm pathology.** Non-traumatic diaphragmatic hernias: hiatal, sliding, paraesophageal hernias; gastroesophageal reflux. Traumatic diaphragmatic hernias. **General and specific clinical and instrumental semiotics of the breast** **General and specific clinical and instrumental semiotics of hernias of the abdominal viscera and their complications:** Inguinal, crural, umbilical, epigastric or Linea alba hernia, internal hernias. **General and specific clinical and instrumental semiotics of oesophageal and gastric pathology:** Gastric Ulcer, Zollinger-Ellison Syndrome. Malignant tumours. Gastroesophageal reflux. **General and specific clinical and instrumental semiotics of the duodenum and small intestine:** Duodenal ulcer. Intestinal infarction, intussusception, proportions and rates, incidence, prevalence, mortality. Meckel diverticulum, lethality. **General and specific clinical and instrumental semiotics of the large intestine:** Acute appendicitis, Colon diverticulosis, Haemorrhoids, Rectal prolapse, Fissures, Abscesses, Anorectal fistulas, Benign and malignant tumours. **Clinical and instrumental semiotics of digestive haemorrhages** (Upper and Lower Digestive Tract) **Physical and instrumental semiotics of diverticulosis/diverticulitis** **Pathophysiology bases of semiotics, clinical and instrumental semiotics of peritonitis**: Acute diffuse, chronic, localized peritonitis. Clinical forms of peritonitis. Subphrenic Abscesses. Pelvic peritonitis. **General and specific clinical and instrumental semiotics of intestinal occlusion:** definition, etiopathogenetic classification, pathophysiology. **Differential semiotics of several types of ileus, and with other syndromes abdominal muscles.** **Physical and instrumental semiotics of constipation of surgical interest** **Physical and instrumental semiotics of faecal incontinence** **Physical and instrumental semiotics of proctological pathology** (haemorrhoids, fissures, perianal fistulas) **General and specific clinical and instrumental semiotics of the liver and biliary tract:** Acute and chronic cholecystitis, common bile duct stones, jaundice of surgical interest and their classification, biliary-digestive fistulas, tumours of the biliary tract. **General and specific clinical and instrumental semiotics of pancreatic pathology:** Tumours, acute and chronic pancreatitis. **Physical and instrumental semiotics of portal hypertension** **The physical and instrumental semiotics of surgical pathologies of the Kidney, urinary and genital system**: Urination alterations, lexicon of urinary qualitative and quantitative alterations. Renal, ureteral, bladder pain and differential semiotics. **Clinical, instrumental, and differential semiotics of vascular pathology:** Acute and chronic ischemic syndromes. Aneurysms. Arteriovenous fistulas. Thrombophlebitis. Varicose veins. **Physical and instrumental semiotics of thyroid diseases**

	Physical and instrumental semiotics of adrenal diseases **Physical and instrumental semiotics of shock** **<u>INSTRUMENTAL SEMIOTICS</u>** Principles of diagnostic methods (Use of techniques and meaning of results)• Muscle enzymes • Cardiac enzymes • blood gas analysis • Bone densitometry • Thoracentesis and pleural fluid examination • Ultrasound • Doppler, Eco-Doppler, Laser-Doppler • Bioimpedance measurement • Anthropo-plicometry • Radial tonometry • Ambulatory blood pressure monitoring • ECG • Echocardiography • Cardiac Catheterization • Chest X-ray • Sputum examination • Bronchoscopy • Digestive endoscopy • Radiology in Medicine and Surgery • Catheterizations • temporary and definitive vascular access • needle aspiration • biopsies • surveys • diagnostic laparoscopy. **<u>MEDICAL-SURGICAL PATHOPHYSIOLOGY</u>** • Obesity and Metabolic Syndrome and Traveling Companions • Chronic liver disease, ascites, jaundice, cholelithiasis • Introduction to other disease of medical and surgical interest, used to describe specific semiology presentations.
Texts and readings	• Fradà et al, Semeiotica medica nell'adulto e nell'anziano. Metodologia clinica di esplorazione morfofunzionale. Ed Piccin – Nuova Libraria • Sesti et al. Manuale di Semeiotica Medica. Il metodo clinico passo dopo passo. Ed. Edra • Douglas et al. MacLeod - Manuale di semeiotica e metodologia medica - Ed. Edra • Thomas et al. Oxford Handbook of Clinical Examination and Practical Skills • De Franciscis et al. Metodologia medica e chirurgica - Idelson-Gnocchi editore • Talley - O'Connor. Clinical examination. Elsevier
Notes, additional materials	• Wilkinson et Al. Oxford. Manuale di medicina clinica. Ed Edra • Schwartz et al "La diagnosi clinica", Ed. EDISES. • Harrison. "Principi di Medicina Interna", Ed. McGraw-Hill
Repository	Teams class

Assessment	
Assessment methods	Method of delivery: oral (at the end of the course) Type: interview (open question, critical discussion of a clinical case) The interview is aimed at verifying that the student has adequate knowledge of the study program, that he is able to proceed with an accurate anamnesis and physical examination, formulating diagnostic hypotheses on the basis of the symptoms and signs, and setting up a diagnostic plan (instrumental semeiotics) that he or she knows how to interpret in the light of an accurate contextual analysis aimed at resolving common clinical problems.

Assessment criteria	The student should be able to demonstrate during the assessment:
	• Ability to learn, knowledge and understanding:
	  ○ Complete educational program (physiopathology, symptoms, and signs of the main pathologies of internal and surgical interest)
	• Applied knowledge and understanding:
	  ○ Accurately fill out the problem-oriented medical record.

	○ Collect an accurate medical history. ○ Perform a general physical examination. • Autonomy of judgement: ○ Formulate diagnostic hypotheses based on critical reasoning on the medical history and physical examination. ○ Set up a diagnostic plan based on the diagnostic hypotheses. • Communication skills: ○ Argue using specific and appropriate nomenclature (competence in the use of specialist vocabulary). ○ Quality of exposure;
Final exam and grading criteria	The final grade is expressed as fraction of thirty. The exam is considered passed when the grade is greater than or equal to 18 for each of the courses of the integrated course. A high rating is awarded when the student demonstrates having developed independent judgment and adequate argumentation and exposition skills.
Other	/

General information	
Year of the course	*II YEAR*
Academic calendar (starting and ending date)	*SECOND SEMESTER*
Credits (CFU/ETCS):	*One credit*
SSD	*ELEMENTS OF EMERGENCIES AND FIRST AID (MED41)*
Language	*Italian*
Mode of attendance	*In Presence, mandatory*

Professor/ Lecturer	
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Virtual room	By telephone or email appointment
Office Hours (and modalities: e.g., by appointment, online, etc.)	By telephone or email appointment

Work schedule			
Hours			
Totals	Lectures	Hands-on (laboratory, workshops, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
25	*12*	*0*	*13*
CFU/ETCS			
1	*1*	*0*	*0*

Learning Objectives	The teaching intends to describe and provide the elements of first aid to the patient according to the procedures and techniques of basic life support and defibrillation (BLSD). It also aims to provide knowledge of the basic principles of recognition, management and treatment of some of the main medical emergency situations.
Course prerequisites	Principles of anatomy and general physiology.

Teaching strategies	The course includes 12 hours of lectures with the support of audiovisual tools and exercises with an obligation to attend 70% of each module.

Expected learning outcomes in terms of **Knowledge and understanding on: (Dublin descriptor 1)**	**Dublin descriptor 1: knowledge and understanding (what does the student know at the end of the course)** • know the main emergencies of resuscitation interest and the associated nosological pictures. • know the main basic cardiac and pulmonary resuscitation techniques.

Applying knowledge and understanding on: (Dublin descriptor 2) **Soft skills (Dublin descriptor 3-5)**	• know how to describe the criteria and general lines of assistance in the management of the main medical emergencies (listed in the teaching programme). **Dublin 2 descriptor: ability to apply knowledge and understanding (what the student can do upon completion of the course or what skills he/she has acquired).** • recognize the main emergencies of resuscitation interest • practice the main cardiopulmonary resuscitation techniques according to BLSD protocols and be able to have an active role during emergency procedures. **Dublin 3 descriptor: Autonomy of judgement** At the end of the course the student must be able to achieve critical thinking skills to provide effective basic interventions and services to patients of different age groups in different emergency conditions. He must assume responsibility for his professional actions, in accordance with the Professional Profile and the Code of Ethics of Physician. **Dublin 4 descriptor: Communication skills** At the end of the course the student will have to achieve the communication skills necessary to establish an effective relationship with the other members of the work team and with users in different age groups to optimize the diagnostic and therapeutic procedure in situations of emergency. **Dublin 5 descriptor: Ability to learn independently** At the end of the course the student must be able to independently expand his or her knowledge in the specific areas of teaching using the methodological processes learned during the course

Content knowledge	Resuscitation
	• First aid – definition, legislation, activation of First Aid Service
	• BLSD adult and children
	• Airway obstruction – adult and children
	• Most frequent emergencies: diagnosis and first aid
	  ○ Syncope
	  ○ Shock
	  ○ Asthma
	  ○ Thoracic pain
	  ○ Diabetes
	  ○ Anaphylaxis
	  ○ Seizures
	  ○ Bleeding
	  ○ Musculoskeletal trauma

Texts and readings	• V. Marco Ranieri, Luciana Mascia, Luigi Tritapepe. Manuale di anestesia ri-animazione e terapia intensiva. EDRA, 2018 • Raffaele De Gaudio, Stefano Romagnoli. ARTID. Anestesia, Rianimazione, Terapia Intensiva, Dolore. Idelson-Gnocchi, 2020 • SIAARTI guidelines • IRC RCP guidelines, 2021 • other materials supplied by the teacher
Notes, additional materials	Bibliographical research
Repository	Drive online; access on request by email

Assessment	
Assessment methods	Oral exam, training on the simulator.

Evaluation criteria	• Knowledge and understanding
	  ○ Must be able to discuss about the themes
	• Applying knowledge and understanding
	  ○ Ability to analyze and critical reasoning
	  ○ Must be able to solve a simple clinical case
	• Autonomy of judgment
	  ○ Must be able to assist the patient
	• Communication skills
	  ○ Must be able to work in team
	  ○ Must be able to interact with patients
	• Capacities to continue learning
	  ○ must be able to find scientific literature about the mail topics of the course

Final exam and grading criteria	The grade is out of thirty and the exam is considered passed if the score is greater than or equal to 18. This score, by means of a weighted average together with the marks of the other modules, will contribute to determining the overall mark of the Course
Other	/

General information	
Year of the course	*II YEAR*
Academic calendar (starting and ending date)	*SECOND SEMESTER*
Credits (CFU/ETCS):	*One credit*
SSD	*JOINT SEMIOLOGY (MED/33)*
Language	*Italian*
Mode of attendance	*Obligatory, mandatory attendance (≥67% of total hours)*

Professor/ Lecturer	
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Department and address	Orthopedic Clinic
Virtual room	Microsoft Teams
Office Hours (and modalities: e.g., by appointment, online, etc.)	To be agreed, upon reservation by email

Work schedule			
Hours			
Totals	Lectures	Hands-on (laboratory, workshops, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
24	*12*	*0*	*12*
CFU/ETCS			
1	*1*	*0*	*0*

Learning Objectives	The educational activity aims to convey to students the knowledge necessary for understanding the following fundamental aspects of human morphology: All systems/apparatuses meet specific functional needs. All systems/apparatuses comprise various organs functionally interconnected with each other. The cardio-circulatory, nervous, and endocrine systems oversee the functional interconnection among all anatomical systems. Based on this, knowledge of the following main concepts will be required: a. Normal macroscopic structure of the major organs and systems, with particular emphasis on their topographical arrangement, including their vascularization, lymphatic drainage, and innervation. b. Microscopic structure correlated with function. c. Functional considerations applied to understanding morphological structure. The course is structured regionally/topographically with frontal teaching hours and interactive laboratories including Surface Anatomy, Regional and Topographic Anatomy on Anatomage Table, and Microscopic Anatomy laboratories, all conducted with small groups of students. While addressing body regions and the organs and systems therein, particular attention will also be given to highlighting the possible clinical implications resulting from the alteration of normal anatomy. The educational activity aims for the student to achieve both macroscopic morphological and microscopic structural knowledge of the human body,

	relative to all apparatuses and systems except for the central and peripheral nervous systems.
Course prerequisites	For a fruitful study and for adequate comprehension of the educational materials, it is noted that the following prerequisite is required: knowledge of cellular biology, physics, chemistry, human histology, and embryology.

Teaching strategies	Frontal teaching carried out through lessons held "ex cathedra" by the teacher with implementation both with forms of active teaching based on the reciprocity of action between teacher and student and with forms of interactive teaching consisting of presenting clinical cases to students, stimulating them to look for the solution through attempts guided by the teacher through opinions, suggestions, explanatory hypotheses. Computer systems will be used during the lesson (PowerPoint presentations, videos, bibliographic searches on web platforms such as PubMed, Scopus, ISI Web, Google Scholar, etc.).

Expected learning outcomes in terms of	The course aims to present the anatomical-functional characterization of the human body both at macroscopic and microscopic levels, including ultrastructural dimensions, within the temporal framework ranging from embryonic development to organogenesis, somatic growth, and ageing. At the end of the course, the student should be familiar with the essential morphological and biomechanical characteristics, the functioning modes, and the general control mechanisms of the systems, apparatuses, organs, tissues, and cells of the human body, as well as their main morpho-functional correlates under normal conditions.
Knowledge and understanding on: (Dublin descriptor 1)	**Dublin descriptor 1: knowledge and understanding (what does the student know at the end of the course)** Upon completion of the course, the student knows and understands the morphology, structural, and functional organization of the human body at macroscopic, microscopic, and ultrastructural levels of systems and organs.
Applying knowledge and understanding on: (Dublin descriptor 2)	**Dublin 2 descriptor: ability to apply knowledge and understanding (what the student can do upon completion of the course or what skills he/she has acquired);** At the end of the course, the student possesses the ability to link the macroscopic, structural, and ultrastructural organization of systems, apparatuses, and organs with their corresponding functions. The student recognizes the macroscopic structure of systems and organs, connecting it with the notions of surface anatomy, topographic anatomy, radiology, and clinical anatomy. They identify and interpret anatomical regions and structures. Additionally, they can apply anatomical knowledge in solving problems related to physiology, pathology, instrumental physical examination, and anatomoclinical correlates
Soft skills (Dublin descriptor 3-5)	**Dublin 3 descriptor: Autonomy of judgement** At the end of the course, the student will have the ability to integrate their anatomical knowledge, managing its complexity, with data from physiology, physiopathology, and physical and instrumental semiotics. The student will be able to formulate judgments on anatomical alterations and their implications in the main physiopathological processes leading to the most common pathological states; they must refer to their knowledge of anatomy in performing physical examination manoeuvres and in interpreting instrumental

	semiotics data. By the end of the course, the student must be able to integrate the knowledge and skills acquired to recognize the differences between physiological and non-physiological anatomical structures. **Dublin 4 descriptor: Communication skills** At the end of the course, the student will have the ability to describe and explain the normal morphology and structure of the human body, also being able to effectively use the communicative tools typical of publications and scientific communications. **Dublin 5 descriptor: Ability to learn independently** At the end of the course, the student will have acquired the ability for autonomous updating on the contents of human anatomy, using the updating methodologies specific to scientific investigation in the biomedical field.
Content knowledge	Articular semiotics: Planes and axes of the body; joint movements and semiotics of the shoulder, elbow, wrist and hand. Joint semiotics and movement of the spine, hip, knee, ankle and foot.
Texts and readings	• Kapandji A. D.- The physiology of the joints - Lower Extremities • Kapandji I. A. - Physiology of the Joints (Upper Extremities) • Kapandji I. A. - The Physiology of the Joints_ The Trunk and the Vertebral Column Elsevier Limited. • Bruce Reider, THE ORTHOPAEDIC PHYSICAL EXAMINATION, 2/e 0-7216-0264-9. Copyright 2005, Elsevier, Inc.
Notes, additional materials	PubMED – SCOPUS – WOS - Google Scholar
Repository	Notes provided by the teacher in digital format (Word file, PDF, Power-Point, etc.) will be uploaded and usable for at least 3 years on Microsoft Teams in the TEAM class.

Assessment	
Assessment methods	The verification of learning takes place through an oral test where the topics of the questions are relevant to the topics covered during the lessons, as part of the Course. The purpose of the test is to highlight the level of specific knowledge achieved by the student, evaluate the ability to orient oneself in the problems covered, evaluate the skills acquired regarding the proposal of solutions to the problems being studied.
Evaluation criteria	In order to demonstrate that the learning outcome has been achieved and what level has been reached, the following will be taken into account: • **Knowledge and understanding:** Ability to discursively organize knowledge (unsatisfactory, adequate, good, excellent). • **Applying knowledge and understanding:** Decision-making competence in using learned clinical reasoning (unsatisfactory, adequate, good, excellent). • **Autonomy of Judgment:** Critical reasoning skills (unsatisfactory, adequate, good, excellent) • **Communication knowledge and understanding:** Quality of presentation and competence of specialist vocabulary (unsatisfactory, adequate, good, excellent) • **Capacity to continue learning:** Adequacy and effectiveness in the ability to learn from self-study (unsatisfactory, adequate, good, excellent)

Final exam and grading criteria	The assessment of final exam takes place collegially (with the Professor of the other modules of the integrated course) through an oral interview. The topics of the questions will be relevant to the topics covered during the lessons, as part of the Course. The grade of the exam is given out of thirty (30), the exam passed when a score greater than or equal to 18. To achieve a high evaluation, the student must have developed independent judgment and adequate argumentation and presentation skills; therefore, honors may be awarded at the discretion of the President after having consulted collegially with the teachers of the modules of the Integrated Course.
Other	/