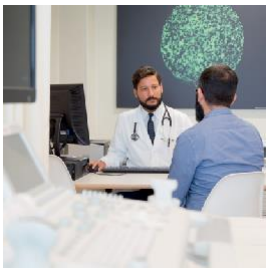
UNIVERSITA' CAMPUS BIO-MEDICO DI ROMA



STUDENT HANDBOOK
Academic Year 2023/2024
Department of Medicine and Surgery

Master's Degree Programme in
MEDICINE AND SURGERY

Campus Bio-Medico University of Rome
Department of Medicine and Surgery

SYLLABUS AND ORGANISATION

DEGREE COURSE STRUCTURE

The Master's Degree Programme in Medicine and Surgery is structured over six years for a total of 360 academic credits (crediti formativi universitari – CFU) in line with the graduation ministerial requirements.
The educational activity includes lectures, small group interactive teaching sessions, mandatory training and dissertation preparation activities.
Within the six years, the curriculum also foresees that students participate in training activities in the various clinical fields for at least 60 CFUs (corresponding to 1500 hours).
Students must also earn 8 CFUs in areas of their choosing. These elective learning activities (attività didattiche elettive – ADE) are part and parcel of the academic curriculum. ADEs can be seminars, clinical and lab training, volunteering activities or similar activities.

TRAINING GOALS

In order to achieve the training objectives, the Master's Degree Programme in Medicine and Surgery requires the student to achieve a total of 360 CFUs in six years; at least 60 CFUs are to be earned through training activities aimed at the acquisition of specific professional skills.
The course is organised in 12 semesters; the integrated courses involved correspond to specific CFUs in compliance with the table of mandatory training activities. Each CFUs corresponds to 25 hours of student engagement, 12.5 of which normally involve frontal lectures in the basic, characterising, and linked disciplines, or theoretical-practical learning (seminars, lab time, and exercises), or 12.5 hours of assisted study within the academic setting. Each professionalising CFUs corresponds to 25 hours of student engagement, under the guidance of a tutor, in small groups within the reference and/or territorial structure. Each final test elective CFU activity corresponds to 25 hours of student engagement.
The Department of Medicine and Surgery establishes the Study Manifesto (Curriculum) which is then published in the Student Handbook as a description of the integrated course structure for each semester, the related CFU, the core curriculum, the specific learning objectives (including those related to the professionalising activity CFU) for each integrated course and the learning assessment methods. The examinations, which can be up to 36, are then scheduled by the designated body within the teaching structure outside of class hours. Passing the examinations entitles the student to be awarded the corresponding CFUs.
The language in which the teaching is administered (English), besides signalling compliance with universally recognised cultural standards, enables interaction with the international scientific community and with a transnational patient audience.
Such openness to international specialist training represents a distinctive added value.
The specific learning project and the teaching method adopted involve the integration of knowledge based on a solid cultural and methodological basis. The study of the pre-clinical disciplines takes place, with a practical imprinting, through lab time and exercises conducted from the first biennium, integrated with morphology and physiology, in order to enable a better understanding of the practical applications of the concepts of genetics, molecular biology, and biochemistry. The teaching method is mainly focused upon the ability to deal with problems (problem-based learning) through an early contact with patients - already from the second year - and a thorough acquisition of the clinical ability to establish a personal relation with them.
Therefore, a highly integrated teaching organisation has been set up with the aim of incentivising the students' ability to gain knowledge in an inter-disciplinary, as opposed to sectorial, fashion. Students are thus placed at the centre of the training process, both in terms of the lecture design and improvements made to the curriculum, in order to enhance their initiative autonomy. True professional competency is only achieved after long term contact with patients and interaction with colleagues, which begins from the first years of the course, and involves the integration of basic sciences with clinical ones along the whole training path. Tutored activities are essential in this regard.
From this perspective, particular importance is given to a learning approach that instils the continuity of training, providing students with the necessary tools for critical access to the knowledge base, to the scientific and statistical method, to evidence-based medicine, and developing a tendency to accessing sources directly. The latter is facilitated by the systematic use of the English language and by the use of the most advanced IT technologies. The reading and understanding of scientific papers are part of the students' training process.
Learning how health care systems are structured and function is a distinctive feature of the Medicine and Surgery training course. The universalist Italian Health Service, which is characterised by a notable experience in terms of methodology and result evaluation, represents a model that many countries aspire to adopt and apply in its more qualifying aspects. An in-depth knowledge of the specificities of the health services of other countries represents an important element in the training of foreign doctors, who will go back to their home

countries to practice their profession, but is also an aspect of innovation for young Italian doctors who become open to international professional opportunities.

The main features of the single cycle Master's Degree Programme in Medicine and Surgery, aimed at the achievement of general, intermediate, and specific goals, can be summarised as follows:
Within the scope of the requirements of the applicable laws, the definition of the objectives, syllabuses, and lectures is of a multidisciplinary nature.
The applied teaching method is interactive and multidisciplinary, involving daily integration of basic sciences and clinical disciplines and the clinical involvement of the students, who are thus led towards a gradual and appropriate approach to patients. The issues pertaining to the basic and clinical sciences are tackled, albeit in varying degrees depending on the various course years, in compliance with a total integration model; this model is based on the constant need to provide students with a unitary and integrated vision, also through the use of multi-voice teaching and of a learning model based on the responsible assessment and resolution of problems.
Doctor-patient relationship is addressed from the very beginning in the teaching activities of the course and continues, with added value, in the integrated teaching of organs and apparatuses. Each lecturer contributes to the students' learning of a patient-centred relationship model. Specific training is provided for personal relationships and for the consideration of each patient's specific characteristics during the course of treatment. The contact with the patient must not generate a tendency towards super- specialisation; it must be open to a global view of the doctor-patient relationship.
Training goals addressed during the early classes are defined through a careful analysis or their respective relevance in respect of overall human biology and of the potential outcomes on the current or foreseeable clinical themes, with particular care given to the competencies pertaining to the scientific method.
Specific goals of the characterising classes have been defined in advance based on epidemiological prevalence, clinical relevance, urgency, and potential for intervention. Special attention is given to aspects of treatment prediction, prevention, and personalisation, always from the evidence-based medicine perspective. Great importance is also given to the relationship with the patient, including its psychological aspects.
The teaching process benefits from a tutorial system, clinical triggers, problem-based learning, experiential learning, problem solving, decision making, seminars and conferences. During the early stages of the patients' approach, students are offered a Basic Life Support (BLS) class.
To achieve a greater degree of integration within the context of systematic medical pathology, lectures pertaining to pathological anatomy, pharmacology, and diagnostic imaging are delivered during the 3rd, 4th, and 5th years. The aim is to frame in an integrated fashion each organ or disease condition from the perspective of the aforementioned subjects with the pertinent diagnostic, pathological, and therapeutic knowledge.
The use of tutors capable of aiding the students' learning process is crucial; tutors act as facilitators of the learning process (area tutors) and provide personal support to the students (personal tutors).
Great care is given to the acquisition of practical abilities (technical skills) through:

- the ever-increasing use of simulation methods, including attendance to University's simulation facility (both to learn the basic manoeuvres of clinical practice and to undergo training on invasive procedures, which are preparatory to patient applications)
- attendance at the University Hospital's wards and surgeries, which takes place through clinical traineeships starting from the 3rd course year. During the 6th year, clinical activities are predominant in the curriculum.
- attendance at territorial health structures, including General Practice surgeries, starting from the 3rd course year, which completes the professionalising training. The aim is to ensure that, when graduating, students will already possess an adequate clinical training that will enable them to begin their specialist training and to practice with suitable competency in the health environment. Thus, on beginning their post-graduate training and in carrying out the professional activities that are accessible right after graduation, the young doctor will already have acquired the basic professionalising competencies.
- traineeships, which are finalised to preparing dissertations and/or to a full immersion aimed at completing, in an oriented and finalised fashion, the learning of notions and skills.

The use of IT tools/methodologies to access bibliographical items and, more generally, international literature, which is explored in depth and completed with the aid of specific tutorials.
A qualifying aspect within the context of the whole course is the great attention paid to the principles of Clinical Methodology and of Human Sciences (anthropology, ethics, bioethics), as well as their applications in the field of medical and scientific activities. Specifically, students gradually learn medical methodology and its rules, based on the principles of evidence-based medicine applied either to individual patients or to populations. This is also effected through the use of guidelines, conceptual maps, and diagnostic-therapeutical algorithms, without prejudice for the personalisation of treatments, wherever this is possible, and even less for the careful

consideration of the uniqueness of each individual patient and of his/her needs. Within the context of such integrated courses, students gradually familiarise with the main concepts of interdisciplinarity, inter-professionalism, health economics, and medical professionalism and social responsibility, and with the main prevention and education measures aimed at patients in their overall humanity.
Specific care is given to Elective Learning Activities (Attività Didattiche Elettive – ADEs), to enable students to personalise their curriculum in specific training fields.

The structuring of the training path over the six course years represents the application of all the above. Specifically, the training path involves, during the first two years and the first part of the third, the unfolding of the two major integrated courses pertaining to the fundamentals of the basic disciplines with a teaching process highly integrated with lab exercises and notions of communication methodology.
The 3rd year sees the beginning of clinical practice, which is characterised by the incorporation of special pharmacology, diagnostic imaging, and pathological anatomy, which are thus integrated with their respective clinical subjects, and are administered along the various course years
During the 4th, 5th, and 6th years, the course continues with the clinical practice pertaining to the more specifically clinical subjects.
Having completed almost all the required lectures by the end of the 5th year, students can exploit the 6th year to engage in mainly clinical-professionalising subjects, with particular reference to emergencies and surgery, and to the role played by heath economics in the management of each country's care resources.

The single cycle Master's Degree Programme in Medicine and Surgery is preparatory for the profession of Doctor/ Surgeon.
Doctors exercise their profession within the National Health Service, and within partner or private structures, in accordance to EU, national and regional regulations. They work with the aim of ensuring that individuals and society at large can maintain, or achieve, the best possible health condition (psycho-physical and social well-being). To carry out their professional activities, doctors collaborate with their colleagues (intraprofessional collaboration) and other professional profiles who have been trained in healthcare (interprofessional collaboration).
Higher degrees of responsibility and coordination in the interprofessional and intraprofessional groups within which doctors work may, in any case, be achieved through the acquisition of further competencies by means of later training courses, such as Specialisation Schools, Regional General Practitioner Training Schools, Research Doctorates and second level Master courses.

OCCUPATIONAL OPPORTUNITIES

The course is a preparatory course in order to become a general practitioner. However, it should be pointed out, that the LM-41 class Master's graduates usually continue their training path in specialty postgraduate schools or in the three-year general medicine regional training course.
The Decree Law no. 18 of March 17, 2020, converted into Law no. 27 of April 24, 2020, has reformed the qualification to practice the profession of Doctor-Surgeon by providing in Article 102, paragraph 1, that the achievement of the single cycle Master's Degree in Medicine and Surgery - Class LM/41 qualifies for the practice of the profession of doctor-surgeon, subject to the acquisition of the judgment of suitability for the pre lauream traineeship (referred to in Article 3 of MIUR Decree no. 58 of May 9, 2018). For further information, please refer to the didactic regulations.

STUDY PLAN - CURRICULUM COHORT YEAR 2023 - 2024

Exam	*Subject*	*Year*	*Term*	*CFUs*
1	Propaedeutics of Medicine	I	1°	19
2	Medical Humanities 1	I	1°	5
3	Italian/English language	I	1°	4
4	Medical Humanities 2	I	1°/2°	5
5	Anatomy 1	I	2°	6
6	Biochemistry	I	2°	6
7	Structure and basic functioning	I	2°	8
8	Immunology & Genetics	II	1°	6
9	Biochemistry	II	1°	7
10	Italian/English language	II	1°	2
11	General Pathology and Pathophysiology & Pharmacology	II	2°	9
12	Physiology	II	1°/2°	16
13	Anatomy 2	II	1°/2°	11
15	Microbiology	II	2°	6
16	Propaedeutics of Clinical Practice	II	2°	4
17	Clinical Medicine 1	III	1°	13
18	Clinical Surgery 1	III	1°	7
19	Diagnostics 1	III	1°	4
20	Oncology 1	III	1°	4
21	Medical statistics & epidemiology	III	1°	3
22	Bioethics and Medical Humanities	III	1°	6
23	Clinical Medicine 2	III	2°	15
24	Clinical Surgery 2	III	2°	7
25	Diagnostics 2	III	2°	3
26	Oncology 2	III	2°	4
27	Neurology and Psychiatry	IV	1°	13
28	Public Health	IV	1°	5
29	Oncology 3	IV	1°	4
30	Diagnostics 3	IV	1°	3
31	Haematology, Infectious diseases & Rheumatology	IV	2°	15
32	Diagnostics 4	IV	2°	3
33	Specialist clinics 1	IV	2°	11
34	Maternal & Infant Health	V	1°	17
35	Diagnostics 5	V	1°	3
36	Specialist clinics 2	V	1°	7
37	Clinical Medicine & Surgery	V	2°	30
38	Community Care	VI	1°	10
39	Emergencies and critical care	VI	1°	15
40	Clinical Practice	VI	2°	24
	Exam CFUs TOTAL			**340**
	Elective Learning Activites (Attività didattiche Elettive – ADEs) – Chosen by students			8
	CFUs for the preparation of the Dissertation			12
	CFUs TOTAL			360

TEACHING ORGANISATION: Integrated Courses and Coordinators

First Year

CFU	Integrated Course	Subject	SSD	Term	Credits SSD	Coordinating lecturer
19	PROPAEDEUTICS OF MEDICINE	Physics	FIS/07	1	3	G. Leanza
		Chemistry and propaedeutic biochemistry	BIO/10	1	5	
		Biology	BIO/13	1	8	
		Genetics	MED/03	1	3	
5	MEDICAL HUMANITIES (1)	Introduction to health humanities	MED/43	1	2	G. Ghilardi
		Anthropology	M-FIL/03	1	1	
		Ethics	M-FIL/03	1	2	
5	MEDICAL HUMANITIES (2)	History of Medicine	MED/02	1 - 2	4	L. Borghi
		Clinical Communication Skills	M-PSI/01	1 - 2	1	
6	ANATOMY	Anatomy	BIO/16	2	6	G. Vivacqua
6	BIOCHEMISTRY	Biochemistry	BIO/10	2	6	A. Leuti
8	STRUCTURE AND BASIC FUNCTIONING	Histology	BIO/17	2	6	M. D'Amelio
		Embryology	BIO/17	2	1	
		Biophysics	BIO/09	2	1	
		Medical statistics	MED/01	2	3	
4		Italian	L-FIL-LET/12	1 - 2	4	
		English	L-LIN/12	1 - 2	4	
1	TE	Teaching Electives	TE	1 - 2	1	

Second Year

CFU	Integrated Course	Subject	SSD	Term	Credits SSD	Coordinating lecturer
8	FUNDAMENTALS OF BASIC SCIENCE (3)	Microbiology	MED/07	1	4	G. Gherardi
		Basic Immunology	MED/04	1	3	
		Molecular Biology	BIO/11	1	1	
7	ANATOMY (2)	Anatomy	BIO/16	1	7	G. Vivacqua
6	BIOCHEMISTRY (1)	Biochemistry	BIO/10	1	6	A. Leuti
6	ANATOMY (3)	Anatomy	BIO/16	2	6	G. Vivacqua
7	BIOCHEMISTRY (2)	Biochemistry	BIO/10	2	7	A. Leuti
7	PHYSIOLOGY (2)	Physiology	BIO/09	2	7	M. D'Amelio
9	PHYSIOLOGY (3)	Physiology	BIO/09	2	9	M. D'Amelio
16	FUNDAMENTALS OF MEDICINE (3)	Training Laboratory Medicine 1	MED/46	2	2	S. Angeletti
		Training Laboratory Medicine 2	MED/05	2	3	
		General Pathophysiology	MED/04	2	4	
		General Pathology	MED/04	2	7	
2		Italian	L-FIL-LET/12	1 - 2	2	
		English	L-LIN/12	1 - 2	2	
1	TE	Teaching Electives	TE	1 - 2	1	

Third Year

CFU	Integrated Course	Subject	SSD	Term	Credits SSD	Coordinating lecturer
3	FUNDAMENTALS OF BASIC SCIENCE (5)	Genetics	MED/03	1	2	F. Gurrieri
		General Pharmacology	BIO/14	1	1	
4	FUNDAMENTALS OF MEDICINE (4)	Medical Ethics	MED/43	1	3	F. De Micco
		Communication skills	M-PSI/05	1	1	
21	CLINICAL MEDICINE (1)	Cardiology	MED/11	1	3	G. Ussia
		Cardiac Surgery	MED/23	1	1	
		Vascular Surgery	MED/22	1	1	
		Respiratory Diseases	MED/10	1	2	
		Thoracic Surgery	MED/21	1	1	
		Oncology	MED/06	1	1	
		Radiotherapy	MED/36	1	1	
	DIAGNOSTICS AND PHARMACOLOGY (CLINICAL MEDICINE 1)	Medical Imaging	MED/36	1	1	
		Introduction to digital images	ING-IND/34	1	1	
		Pathology	MED/08	1	2	
		Pharmacology	BIO/14	1	1	
	CLINICAL PRACTICE (1)	Cardiology	MED/11	1	2	
		Cardiac Surgery	MED/23	1	1	
		Vascular Surgery	MED/22	1	1	
		Respiratory Diseases	MED/10	1	1	
		Thoracic Surgery	MED/21	1	1	
30	CLINICAL MEDICINE (2)	Nephrology	MED/14	2	2	P. Pozzilli
		Urology	MED/24	2	1	
		Gastroenterology	MED/12	2	3	
		Digestive Surgery	MED/18	2	2	
		Endocrinology	MED/13	2	2	
		Oncology	MED/06	2	1	
		Haematology	MED/15	2	3	
		Oncological digestive, endocrinology and metabolic surgery	MED/18	2	2	
	DIAGNOSTICS AND PHARMACOLOGY (CLINICAL MEDICINE 2)	Medical Imaging	MED/36	2	1	
		Pathology	MED/08	2	2	
		Pharmacology	BIO/14	2	1	
	CLINICAL PRACTICE (2)	Nephrology	MED/14	2	1	
		Urology	MED/24	2	1	
		Gastroenterology	MED/12	2	1	
		Endocrinology	MED/13	2	1	
		Oncology	MED/06	2	2	
		Haematology	MED/15	2	1	
		Oncological digestive, endocrinology and metabolic surgery	MED/18	2	1	
		Radiotherapy	MED/36	2	1	
		Laboratory Medicine	MED/46	2	1	
2	TE	Teaching Electives	TE	1 - 2	2	

Fourth Year

CFU	Integrated Course	Subject	SSD	Term	Credits SSD	Coordinating lecturer
24	CLINICAL MEDICINE (3)	Neurology	MED/26	1	4	V. Di Lazzaro
		Neurosurgery	MED/27	1	1	
		Surgery	MED/18	1	1	
		Radiotherapy Neurosurgery	MED/36	1	1	
		Oncology	MED/06	1	1	
		Infectious diseases	MED/17	1	2	
		Psychiatry	MED/25	1	1	
		Immunology and Allergology	MED/09	1	2	
	DIAGNOSTICS AND PHARMACOLOGY (CLINICAL MEDICINE 3)	Medical Imaging	MED/36	1	1	
		Pathology	MED/08	1	2	
		Pharmacology	BIO/14	1	2	
	CLINICAL PRACTICE (3)	Neurology	MED/26	1	1	
		Neurosurgery	MED/27	1	1	
		Oncology	MED/06	1	1	
		Surgery	MED/18	1	1	
		Infectious Diseases	MED/17	1	1	
		Immunology and Allergology	MED/09	1	1	
25	CLINICAL MEDICINE (4)	Rheumatology	MED/16	2	2	M. Caricato
		Orthopaedics	MED/33	2	3	
		Orthopaedics Radiotherapy	MED/36	2	1	
		Physiatrics and Rehabilitation	MED/34	2	1	
		Ophtalmology	MED/30	2	2	
		Otorhinolaryngology	MED/31	2	2	
		Head and Neck Surgery	MED/18	2	1	
		Head and Neck Radiotherapy	MED/36	2	1	
		Odontostomatology	MED/28	2	1	
		Oral and Maxillofacial Surgery	MED/29	2	1	
	DIAGNOSTICS AND PHARMACOLOGY (CLINICAL MEDICINE 4)	Medical Imaging	MED/36	2	1	
		Pathology	MED/08	2	2	
		Pharmacology	BIO/14	2	1	
	CLINICAL PRACTICE (4)	Rheumatology	MED/16	2	1	
		Orthopaedics	MED/33	2	1	
		Physiatrics and Rehabilitation	MED/34	2	1	
		Ophtalmology	MED/30	2	1	
		Otorhinolaryngology	MED/31	2	1	
		Head and Neck Surgery	MED/18	2	1	
2	TE	Teaching Electives	TE	1 - 2	2	

Fifth Year

CFU	Integrated Course	Subject	SSD	Term	Credits SSD	Coordinating lecturer
35	CLINICAL MEDICINE (5)	Internal Medicine	MED/09	1	4	U. Vespasiani
		Paediatrics	MED/38	1	5	
		Paediatric Neuropshychiatry	MED/39	1	1	
		Clinical Psychology	M-PSI/08	1	2	
		Geriatrics	MED/09	1	2	
		Gynaecology	MED/40	1	5	
		Obstetrics	MED/40	1	2	
	DIAGNOSTICS AND PHARMACOLOGY (CLINICAL MEDICINE 5)	Medical Imaging	MED/36	1	1	
		Pathology	MED/08	1	1	
		Pharmacology	BIO/14	1	1	
	CLINICAL PRACTICE (5)	Internal Medicine	MED/09	1	4	
		Paediatrics	MED/38	1	2	
		Paediatrics Surgery	MED/38	1	1	
		Gynaecology and Obstetrics	MED/40	1	2	
		Geriatrics	MED/09	1	2	
14	CLINICAL MEDICINE (6)	Psychiatry	MED/25	2	3	M. Ribolsi
		Dermatology	MED/35	2	2	
		Plastic Surgery	MED/19	2	1	
	DIAGNOSTICS AND PHARMACOLOGY (CLINICAL MEDICINE 6)	Medical Imaging	MED/36	2	1	
		Pathology	MED/08	2	2	
		Pharmacology	BIO/14	2	2	
	CLINICAL PRACTICE (6)	Psychiatry	MED/25	2	1	
		Dermatology	MED/35	2	1	
		Plastic Surgery	MED/19	2	1	
10	CARDIOVASCULAR EMERGENCY	Emergencies	MED/23	2	4	N. Montelione
		Emergencies	MED/11	2	4	
		Emergencies	MED/41	2	2	
1	TE	Teaching Electives	TE	1 - 2	1	

ACADEMIC CALENDAR

SEMESTER	TEACHING ACTIVITIES	EXAM SESSION	TEACHING ACTIVITIES BREAKS
I semester	From September 25, 2023 To January 20, 2023	From January 8, 2024 To March 1, 2024	**Christmas Break** From December 23, 2023 To January 5, 2024
II semester	From March 4, 2024 To May 24, 2024	From May 25, 2024 To July 31, 2024	**Easter Break** From March 28, 2024 To April 2, 2024
Catch-up session: Autumn From September 2, 2024 to September 30, 2024			

Please note: opening and closing dates indicated in the table above

Teaching activities are suspended during the following holidays:

All Saints' Day: November 1st, 2023
Immaculate Conception: December 8th, 2023
Christmas Day: December 25th, 2023
St. Stephen's Day: December 26th, 2023
New Year's Day: January 1st, 2024
Epiphany: January 6th, 2024
Easter Sunday: March 31st, 2024
Easter Monday: April 1st, 2024
Liberation Day: April 25th, 2024
Labour Day: May 1st, 2024
Republic Day: June 2nd, 2024
Saint Josèmarìa Escrivá de Balaguer: June 26th, 2024
Saint Peter and Saint Paul - only in Rome: June 29th, 2024