

COURSE DETAILS

"INTEGRATED COURSE OF ONCOLOGICAL AND HAEMATOLOGICAL DISEASES"

SSD MED/06, MED/09, MED/15, MED/18, MED/36*

DEGREE PROGRAMME: MEDICINE AND SURGERY (P11)

COORDINATOR: PROF. FABRIZIO PANE

ACADEMIC YEAR 2024-2025

GENERAL INFORMATION – TEACHER REFERENCES

TEACHER: PROF. FABRIZIO PANE

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Faculty	Position	Scientific Fields	Phone	Reception	E-mail
Arpino Grazia	Associate Professor	Oncology	3759	Thursday/11 a.m. – 12 a.m./ Bldg. 1	grazia.arpino@unina.it
Battipaglia Giorgia	RTD	Hematology	4729	Wednesday/3 p.m. – 4 p.m./ Bldg. 1	giorgia.battipaglia@unina.it
Bianco Roberto	Full Professor	Oncology	2061	Tuesday/3 p.m. – 4 p.m./Bldg. 1	robiano@unina.it
Carlomagno Chiara	Associate Professor	Oncology	4271	Thursday/2 p.m. – 3 p.m./ Bldg 1	ccarloma@unina.it
De Angelis Carmine	RTD	Oncology	3772	Monday/1 p.m. – 2 p.m./ Bldg 1	carmine.deangelis@unina.it
De Palma Giovanni	Full Professor	General Surgery	2773	Wednesday/1 p.m. – 4 p.m./ Bldg. 10	giovanni.depalma@unina.it
Di Minno Matteo	Associate Professor	Internal Medicine	4323	Wednesday/3:30 – 6:30p.m./ Bldg. 1	matteo.diminno@unina.it
Formisano Luigi	RTD	Oncology	3661	Tuesday/ 1 p.m. – 2 p.m./ Bldg 1	luigi.formisano1@unina.it
Giuliano Mario	Associate Professor	Oncology	3772	Monday/1 p.m. – 2 p.m./ Bldg 1	m.giuliano@unina.it
Grimaldi Francesco	RTD	Hematology	2037	Tuesday/ 3 p.m. – 4 p.m./ Bldg 1	francesco.grimaldi1@unina.it
Martinelli Vincenzo	Associate Professor	Hematology	4392	Wednesday/2:30–4:30 p.m./ Bldg. 1	vimartin@unina.it
Memoli Mara	RTD	Hematology	2037	Friday/10 a.m. – 12 a.m./ Bldg. 1	mara.memoli@unina.it
Pacelli Roberto	Full Professor	Radiotherapy	3862	Monday/12 a.m. – 1 p.m./ Bldg 10	roberto.pacelli@unina.it
Pane Fabrizio	Full Professor	Hematology	2068	Monday/10 a.m. –1 p.m./ Bldg. 1	fabrizio.pane@unina.it
Picardi Marco	Associate Professor	Hematology	4729	Thursday/12 a.m. – 1 p.m./ Bldg 1	marco.picardi@unina.it
Quintarelli Concetta	Associate Professor	Hematology	2037	Friday/10 a.m. – 12 a.m./ Bldg. 1	concetta.quintarelli@unina.it
Servetto Alberto	RTD	Oncology	3661	Monday/ 1 p.m. – 2 p.m. ./ Bldg 1	alberto.servetto@unina.it

GENERAL INFORMATION about the course

TEACHING LANGUAGE: ENGLISH

CHANNEL (IF APPLICABLE): 1

YEAR OF THE DEGREE PROGRAMME: V

SEMESTER: I

CFU: 12

REQUIRED PRELIMINARY COURSES

General Pathophysiology, Clinical Medical Surgical Methodology, Anatomy and Pathological Histology

PREREQUISITES

For a proper understanding of the topics discussed in the Integrated Course, students should have acquired general knowledge of the hematological system anatomy and physiology, cancer pathogenesis and knowledge of the mechanisms underlying human diseases.

LEARNING GOALS

The aim of the course is to learn advanced knowledge regarding the pathogenesis, the clinical manifestations, the prognostic and therapeutic implications of the oncological and haematological diseases, both malignant and non-malignant. Students will also be capable to suggest the best therapeutic approach (medical, radiotherapeutic, surgical), also considering the benefit-risk ratio and the clinical context.

EXPECTED LEARNING OUTCOMES

Students will acquire the fundamental knowledge that will enable them to understand the underlying mechanisms of the oncological and haematological diseases, both malignant and non-malignant. The student must, at the end of the course: 1. know the etiopathogenesis underlying the different systemic diseases; 2. connect morphological aspects to cellular and molecular changes; 3. Recognize direct and indirect symptoms; 4. establish the diagnostic and therapeutic development of the different pathologies 5. establish basic indications of the therapeutic strategy (ex: medical or surgical therapy).

Knowledge and understanding

The course is mainly focused on the pathogenesis, clinical manifestations and therapeutic management of the main oncological and haematological diseases, both malignant and non-malignant. Discussion of clinical cases will help improving disease knowledge and medical reasoning.

Applying knowledge and understanding

Through the theoretical and practical notions provided from the course, students should develop critical thinking skills and should be capable to autonomously deepen their knowledge and keep up to date of oncological and haematological diseases, both malignant and non-malignant.

At the end of the course, students should fluently discuss all the learned notions, using the most appropriate terminology and should also be capable to communicate, with a simple but comprehensive and accurate language, the main informations about oncological and haematological diseases to non-experts (i.e. patients)

COURSE CONTENT/SYLLABUS

Medical Oncology

- Epidemiology and prevention: risk factors; hereditary and sporadic cancer; primary and secondary cancer prevention.
- General aspects of tumour biology: neoplastic transformation e metastatic process; molecular mechanisms of tumour growth.
- Diagnosis and staging of solid tumours; predictive and prognostic factors; response evaluation criteria.
- Principles of anti-tumour therapy: general aspects, main objectives and techniques of surgical, radiation and systemic therapies (neoadjuvant, adjuvant and palliative); combinatorial treatments; emergencies in oncology; supportive care.
- Anti-tumour drugs: mechanisms of action, clinical indications, side effects, and main mechanisms of resistance.
- Special part: etiopathogenesis, clinical presentation, diagnosis and therapy of the main solid tumours.
- Principles and aims of palliative therapies in oncology

Hematology and Disorders of Hemostasis

- General aspects of hemopoiesis and diagnostic approach to blood and hemostasis disorders
- Inherited and acquired anemias: molecular mechanisms, pathogenesis, clinical picture and principles of therapy
- Acute and chronic leukemias and myeloproliferative neoplasms: molecular pathogenesis, clinical picture and therapy
- Lymphoproliferative disorders and plasma cell neoplasms: molecular pathogenesis, clinical picture and principles of therapy
- Autologous and Allogeneic stem cell transplant and the molecular principles of the modern immunotherapies
- Principles and aims of palliative therapies in blood neoplastic disorders
- Inherited and acquired thrombocytopathies and thrombocytopenias: molecular mechanisms, clinical picture and therapy
- Inherited and acquired coagulation disorders. Thrombophilia and arterial and venous thromboembolisms

Radiation Oncology

- Principles of radiobiology
- Generality of radiation treatment and technical aspects of patient management
- Indication and modality of Radiotherapy in the more common solid and hematological neoplasms

TEACHING ACTIVITIES			
Week	Day / Hour	Lessons/Seminars	Teacher
1°W 30 sept - 4 oct. 2024	Wed 2/10 14:00-16:00	Oncology: Epidemiology	Servetto
		Oncology: Primary and secondary cancer prevention	Servetto
	Fri 4/10 14:00-16:00	Oncology: Hormonal anti-cancer drugs: mechanisms of action and resistance	Servetto
		Oncology: Targeted anti-cancer drugs: mechanisms of action and resistance	Servetto

2°W 7 - 11 oct. 2024	Wed 9/10 14:00-16:00	Hematology: Introduction; Hematological semeiotics	Memoli
		Hematology: Introduction on Anemias; microcitic anemias	Memoli
	Fri 11/10 14:00-16:00	Hematology: hemolytic anemias; megaloblastic anemias	Grimaldi
		Hematology: Myelodisplastic syndromes	Grimaldi
3°W 14 - 18 oct. 2024	Wed 16/10 14:00-16:00	Hematology: Ph-negative Chronic myeloproliferative neoplasms	Pane
		Hematology: Chronic myeloid leukemia	Pane
	Fri 18/10 14:00-16:00	Radiotherapy: Principles of radiobiology and radiotherapy of tumors	Pacelli
		Oncology: Anti-cancer chemotherapy drugs: mechanisms of action and resistance	Formisano L.
4°W 21 – 25 oct. 2024	Wed 23/10 14:00-16:00	Hematology: Acute myeloid leukemia	Battipaglia
		Hematology: Acute lymphoblastic leukemia	Battipaglia
	Fri 25/10 14:00-16:00	Oncology: Predictive and prognostic factors	Bianco
		Oncology: Response evaluation criteria	Bianco
5°W 28 oct – 1 nov. 2023	Wed 30/10 14:00-16:00	Hematology: Chronic lymphoid leukemia and lymphoproliferative disorders	Grimaldi
		Hematology: Indolent Non-Hodgkin lymphomas	Picardi
6°W 4 - 8 nov. 2024	Wed 6/11 14:00-16:00	Hematology: Aggressive Non-Hodgkin lymphomas	Picardi
		Hematology: Hodgkin lymphoma	Picardi
	Fri 8/11 14:00-16:00	Hematology: MGUS, Multiple myeloma and Amyloidosis	Memoli
		Hematology: Stem cells and autologous stem cell transplantation	Battipaglia
7°W 11 – 15 nov. 2024	Wed 13/11 14:00-16:00	Oncology: Clinical approach to the patient with breast cancer; hormonal therapy for breast cancer	Arpino
		Oncology: Biological therapies and chemotherapy for breast cancer	Arpino
	Fri 15/11 14:00-16:00	Hematology: Principles of Allogenic stem cell transplantation	Battipaglia
		Hematology: Clinical application of the Allogenic stem cell transplantation	Battipaglia

8°W 18 - 22 nov. 2024	Wed 18/11 14:00-16:00	Oncology: Adjuvant treatment of colorectal cancer	Carlomagno
		Oncology: Treatment of metastatic colorectal cancer	Carlomagno
	Fri 22/11 14:00-16:00	Oncology: Medical treatment for lung cancer	Bianco
		Radiotherapy: Radiotherapy for lung cancer	Pacelli

9°W 25 – 29 nov 2024	Wed 27/10 14:00-16:00	Radiotherapy: Radiotherapy of colorectal and breast cancer	Pacelli
		Oncology: Medical treatment of ovarian and uterine cancers	Arpino
	Fri 29/11 14:00-16:00	Oncology: Testicular and prostate cancer	Bianco
		Oncology: Melanoma	De Angelis
10°W 2 - 6 dic. 2022	Wed 4/12 14:00-16:00	Radiotherapy: Lymphoma radiotherapy and radiotherapy of primary and secondary CNS tumors	Pacelli
		Radiotherapy: Radiotherapy of urogenital neoplasms	Pacelli
	Fri 6/123 14:00-16:00	Hemat/Int Med.: General framework of bleeding disorders and haemophilia	Di Minno
		Hemat/Int Med.: Venous thromboembolism: prophylaxis and therapy	Di Minno
11°W nov-15 dic. 2022	Wed 13/12 14:00-16:00	Surgery: Surgical treatment of colorectal cancer	De Palma
		Surgery: Principles of surgical oncology. Diagnostic aspects and surgical therapy of breast cancer	De Palma
	Fri 15/12 14:00-16:00		

READINGS/BIBLIOGRAPHY

Medical Oncology: BIANCO A. R., DE PLACIDO S., TORTORA G. Core Curriculum Oncologia Clinica, McGraw-Hill Italia, VI edizione, 2015.

Hematology and Disorders of Hemostasis: TURA S. CAVO M. ZINZANI P. - Hematology, Ed. Esculapio, 2018

TEACHING METHODS

The course will be based for the 75% of the course on lectures (n. hours = 72 hours) with the support of power points and on the 25% on Clinical Clerkships (n. hours = 25).

EXAMINATION/EVALUATION CRITERIA

a) Exam type:

Exam type	
written and oral	
only written	
only oral	X
project discussion	
other	

In case of a written exam, questions refer to: (*)	Multiple choice answers	
	Open answers	
	Numerical exercises	

(*) multiple options are possible

b) Evaluation pattern:

The oral exam consists in 3 questions for each module. The final mark will be weighted on CFU of each module and therefore will be made up of: Medical Oncology 50% and Hematology and Disorders of Hemostasis 50%.