

DISCIPLINE SHEET**ACADEMIC YEAR****2022- 2023****1. DATA ABOUT THE STUDY PROGRAM**

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| 1.1 Institution of higher education | UNIVERSITY OF MEDICINE AND PHARMACY OF CRAIOVA |
| 1.2 Faculty | MEDICINE |
| 1.3 Department | 3 |
| 1.4 Study domain | HEALTH |
| 1.5 Study cycle | LICENCE |
| 1.6 Study program/ Qualification | MEDICINE |

2. DATA ABOUT THE DISCIPLINE

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| 2.1 DISCIPLINE NAME | ONCOLOGY. PALLIATIVE CARE | | | | |
| 2.2. Discipline code | MED 5210 | | | | |
| 2.3 The holder of course activities | SCHENKER MICHAEL/ CRIȘAN ANDA | | | | |
| 2.4 The holder of seminar activities | Schenker Michael/ Crișan Anda/ Lungulescu Cristian/ Streba Liliana/ Ciurea Ana-Maria | | | | |
| 2.5. Academic degree | Associate Professor Dr. Schenker Michael Lecturer Dr. Crișan Anda Lecturer Dr. Lungulescu Cristian Virgil Lecturer Dr. Streba Liliana Teaching Assistant Dr. Ciurea Ana Maria | | | | |
| 2.6. Employment (base norm/associate) | Base norm/associate | | | | |
| 2.7. Year of study | V | 2.8. Semester | II | 2.9. Course type (content) 2.10. Regime of discipline (compulsoriness) | CSD |

3. TOTAL ESTIMATED TIME (teaching hours per semester)

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|---|------------|------------------------|------------|-------------------------|-----------|
| 3.1 Number of hours per week | 3,5 | 3.2 From which: course | 1,5 | 3.3 seminary/laboratory | 2 |
| 3.4 Total hours in curriculum | 49 | 3.5 From which: course | 21 | 3.6 seminary/laboratory | 28 |
| Time found distribution (hours) | | | | | |
| Study by manual, course support, bibliography and notes | | | | | 20 |
| Additional documentation in the library, on specialized electronic platforms and on the field | | | | | 15 |
| Preparation for seminars/labs, homework, reports, portfolios and essays | | | | | 10 |
| Tutoring | | | | | - |
| Examinations | | | | | 1 |
| Other activities, counseling, student circles | | | | | 5 |
| 3.7 Total hours of individual study | 51 | | | | |
| 3.9 Total hours per semester | 100 | | | | |
| 3.10 Number of credits | 4 | | | | |

4. PREREQUISITES (where appropriate)

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| 4.1 curriculum | Students must have solid knowledge of anatomy, cell biology, anatomopathology, medical semiology, radiology, surgery. |
| 4.2 competency | - |

5. CONDITIONS (where appropriate)

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| 5.1. of course deployment | Preparing in advance, through self-study, the theme to be addressed at the course. |
| 5.2. of seminary/ lab deployment | Preparing in advance, through self-study, the theme to be addressed in practical works. |

6. SPECIFIC ACQUIRED COMPETENCES

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| P R O F E S S I O N A L C O M P E T E N C E S | <p>C1 - To identify the state of the disease and to establish the correct diagnosis of the disease (diseases).</p> <p>C4 - To address the health problems/ disease from the perspective of the particularities of the community, in direct relationship with it's social, economic and/or cultural terms.</p> <p>C5 - To initiate and conduct scientific research or/and formative research in their field of competence.</p> |
| T R A N S V E R S A L C O M P E T E N C E S | <p>CT1 - Autonomy and responsibility</p> <ul style="list-style-type: none"> ■ achievement of moral compass, formation of professional and civic attitudes that would allow students to be fair, honest, nonconflictual, cooperative, understanding in front of suffering, being available to help people and interested in community development; ■ to know, to respect and contribute to the development of moral values and professional ethics; ■ to learn to recognize when a problem arises and offer responsible solutions to solve it. <p>CT2.- Social interaction</p> <ul style="list-style-type: none"> ■ to recognize and have respect for diversity and multiculturalism; ■ to have or learn to develop teamwork skills; ■ communicate orally and in writing the requirements, working methods, results and to consult with the team; ■ get involved in volunteering, to know the essential problems of the community. <p>CT3.- Personal and professional development</p> <ul style="list-style-type: none"> ■ to be open to lifelong learning; ■ to be aware of the need for individual study as the basis of personal autonomy and professional development; ■ to optimally and creatively exploit its own potential within collective activities; ■ to know how to use information and communication technology. |

7. DISCIPLINE OBJECTIVES (based on the grid of specific acquired competences)

7.1 The general objectives of the discipline

- emphasizing the importance of oncological pathology and the overall presentation of this pathology, but also of its particularities, the presentation of the complex mechanisms of oncogenesis, of the advances made in the knowledge of the molecular biology of cancer;
- knowledge of measures for prevention and prophylaxis of malignant neoplastic disease;
- knowledge and interpretation of the symptoms and signs of oncological diseases;
- acquiring the skills of the correct examination of the oncological patient;
- interpretation of paraclinical diagnosis - biological and imaging - in oncological pathology;
- the correct formulation of the oncological diagnosis, the establishment of the stage diagnosis of the oncological disease;
- learning the therapeutic principles specific to neoplastic disease - indications, side effects, the oncological patient circuit.

7.2 The specific objectives of the discipline

- Through the curriculum adapted to European quality standards, through the teaching and evaluation methods used, through the involvement of students in research and patient evaluation activities, the oncology discipline aims to form cognitive skills, habits and attitudes that underlie any preventive, diagnostic, curative or rehabilitative medical act.
- Upon completion of the discipline the student will be able to acquire COGNITIVE SKILLS**, which will allow him to:
- understand the main mechanisms of the appearance and development of malignant neoplasms (etiology, knowledge of risk factors in malignant neoplastic disease, mechanisms of carcinogenesis);
 - critically analyze the variations of some biological parameters and to identify the factors that induce these variations: hepatic, renal functional parameters, pancreatic enzymes, tumor markers;
 - interpret diagrams, graphical representations of some functions or functional parameters;
 - integrate the theoretical and practical knowledge acquired in the oncology discipline with those obtained from other disciplines and to use them as a platform for clinical training;
 - communicate clearly, rigorously the acquired knowledge or the obtained results;
 - issue working hypotheses and to verify them by experiment.
- NB: THE COURSES AND PRACTICAL WORKS WILL FOLLOW THE USE OF THE STUDENT'S KNOWLEDGE FROM THE OTHER DISCIPLINES AND WILL ONLY ACCENTUATE THE ELEMENTS SPECIFIC TO ONCOLOGY.**
- PRACTICAL SKILLS**
- to organize the practical work: to form a team, to share the tasks, to collaborate, to communicate the requirements, to prepare the appropriate clinical cases, to follow a given protocol, to follow the communication of the student with the patient, to follow the clinical examination, to discuss in teams the particularities of each clinical case;
 - establishing the complete diagnosis (pre-therapeutic clinical staging and anatomopathological diagnosis) correlated with establishing the therapeutic indications according to it;
 - to present the main therapeutic principles specific to oncological diseases (chemotherapy, hormone therapy, radiotherapy, surgery, immunotherapy, molecular targeted therapy);
 - to know the side effects of oncological therapies and their management;
 - to outline a diagnostic plan - oncological approach (etiology, diagnosis, treatment) of the main neoplastic localizations (mammary gland cancer, cervical cancer, bronchopulmonary cancer, colorectal cancer, prostate cancer);
 - to be able to adapt the anamnesis, the objective examination and the paraclinical examinations to the evolutionary specificity of the main

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| | <p>malignant neoplastic localizations; - to correctly examine the patient with oncological disease (acute or chronic); - to correctly present a clinical case with oncological pathology (one of the main locations mentioned above).</p> <p>ATTITUDES</p> <ul style="list-style-type: none"> • to be open to the acquisition of moral landmarks, the formation of professional and civic attitudes, which allow students to be fair, honest, non-conflicting, cooperative, understanding in front of suffering, available to help people, interested in community development; • to know, respect and contribute to the development of moral values and professional ethics; • learn to recognize a problem when it arises and find responsible solutions to solve it; • to recognize and to respect diversity and multiculturalism; • have or learn to develop teamwork skills; • to communicate orally and in writing the requirements, the way of working, the obtained results and to consult with the team; • to get involved in volunteer actions, to know the essential problems of the community; • be open to learning throughout the career; • to be aware of the need for individual study as a basis for personal autonomy and professional development; • to capitalize optimally and creatively on their own potential in collective activities; • to know how to use information and communication technology, to have initiative, to get involved in the educational and scientific activities of the discipline. |
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8. CONTENTS

| 8.1 Course (content units) | hours |
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| <p>COURSE No. 1 Introduction to Oncology - organization, rules, specific documents - introductory course.</p> <p>Cancer - definition, importance, elements of epidemiology.</p> <p>Organizing the oncology network in Romania.</p> <p>Patient circuit in oncology. Oncological evidence, specific documents.</p> <p>From early detection to specific treatment and post-therapeutic monitoring.</p> <p>The National Plan against Cancer.</p> | 1,5 |
| <p>COURSE No. 2 Diagnosis of cancer.</p> <p>Clinical examination and anamnesis in oncology.</p> <p>Elements of anatomy-pathology necessary in oncology.</p> <p>Elements of molecular and genetic diagnosis - generalities, importance.</p> | 1,5 |

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| <p>COURSE No. 3 Diagnosis of cancer.</p> <p>Cancer staging.</p> <p>Imaging elements required in oncology. RECIST criteria.</p> <p>Invasive diagnostic methods in oncology.</p> <p>The role and place of blood tests in oncology.</p> <p>Drawing up an investigation plan for a patient suspected of having cancer/ being diagnosed with cancer.</p> | 1,5 |
| <p>COURSE No. 4 The pathogenesis of cancer.</p> <p>Carcinogenesis - general notions.</p> | 1,5 |
| <p>COURSE No. 5 Principles of treatment in oncology.</p> <p>Multidisciplinary Commission for the Establishment of Therapeutic Indication.</p> <p>Elements necessary to establish the therapeutic strategy in oncology.</p> <p>Principles of cancer treatment.</p> | 1,5 |
| <p>COURSE No. 6 Principles of treatment in oncology.</p> <p>Principles of radiotherapy.</p> <p>Principles of oncological surgery.</p> | 1,5 |
| <p>COURSE No. 7 Principles of treatment in oncology.</p> <p>Principles of specific oncological systemic treatment - chemotherapy.</p> | 1,5 |
| <p>COURSE No. 8 Principles of treatment in oncology.</p> <p>Principles of specific oncological systemic treatment - molecular therapy.</p> | 1,5 |
| <p>COURSE No. 9 Principles of treatment in oncology.</p> <p>Principles of specific oncological systemic treatment - immunotherapy, hormone therapy.</p> | 1,5 |
| <p>COURSE No. 10 General notions of psycho-oncology and communication in cancer.</p> <p>Elements of psycho-oncology.</p> <p>Doctor-patient communication.</p> | 1,5 |

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| <p>Diagnosis communication.</p> <p>Bad news communication.</p> | |
| <p>COURSE No. 11 Complications in the evolution of the cancer patient.</p> <p>Complications of cancer - diagnosis and treatment.</p> <p>Complications of specific oncological treatment - diagnosis and treatment.</p> | 1,5 |
| <p>COURSE No. 12 Emergencies in oncology.</p> <p>Emergencies in oncology - diagnosis and treatment.</p> | 1,5 |
| <p>COURSE No. 13 Evaluation of an oncological patient in emergency situations.</p> <p>Emergency oncology evaluation algorithm.</p> <p>Necessary investigations for the evaluation of the cancer patient in the Emergency Room.</p> | 1,5 |
| <p>COURSE No. 14 Clinical research in Oncology.</p> <p>Principles of clinical trials in Oncology.</p> | 1,5 |
| 8.2 Practical work (topics/ themes) | |
| <p>1. Introductory practical work.</p> <p>The role and responsibilities of the oncologist.</p> <p>Patient circuit in oncology.</p> <p>ONC sheets and other specific forms used in oncology practice.</p> | 2 |
| <p>2. Interview (history) of the cancer patient.</p> <p>Physical examination in oncology - general (systemic) and loco-regional.</p> <p>Drawing up an investigation plan.</p> <p>Interventional techniques used in the diagnosis and / or treatment of cancer.</p> | 2 |
| <p>3. Interpretation of the results of biological, imaging and functional investigations of the patient diagnosed with cancer.</p> <p>Multidisciplinary commission for establishing the therapeutic indication - way of working, clinical scenarios.</p> <p>Principles of prescribing specific and non-specific medication in oncology.</p> | 2 |

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| 4. SEMINAR. Breast cancer. | 2 |
| 5. Breast cancer. | 2 |
| 6. Breast cancer. | 2 |
| 7. Lung cancer. | 2 |
| 8. Lung cancer. | 2 |
| 9. Cervical cancer. | 2 |
| 10. Colorectal cancer. | 2 |
| 11. Colorectal cancer. | 2 |
| 12. SEMINAR. Clinical cases. | 2 |
| 13. Prostate cancer. | 2 |
| 14. Gastric cancer. | 2 |
| BIBLIOGRAPHY <ol style="list-style-type: none"> 1. Oncologie generala. Miron L.- IIIrd edition, Editura” Gr.T. Popa”, Iasi - 2016 2. UICC – Classification of malignant tumours – last edition – 2017 (https://www.uicc.org/resources/tnm) 3. Cancer Principles &Practice of Oncology -Vincent DeVita Jr, Th.S. Lawrence, S.A. Rosenberg, all editions 4. Curs de Oncologie Clinica si Nursing in Oncologie - Badulescu F., Danciulescu M., Crisan A., Schenker M., Editura Medicala Universitara, Craiova 2015 5. ESMO guidelines – Oncology. Solid tumours. Supportive treatment: https://www.esmo.org/guidelines 6. NCCN guidelines - https://www.nccn.org/guidelines | |

9. CORROBORATING THE DISCIPLINE CONTENT WITH THE EXPECTATIONS OF EPISTEMIC COMMUNITY REPRESENTATIVES, PROFESSIONAL ASSOCIATIONS AND EMPLOYEE REPRESENTATIVES RELATING TO THIS PROGRAM

- Discipline of Oncology is a fundamental discipline, mandatory for a student to become a doctor;
- Knowledge, practical skills and the learned attitudes at this discipline provide the basis for pathological processes which will be detailed at other disciplines and forms the basis for the understanding and learning of any preventively, diagnostic, curative or nursing medical act.

10. METHODOLOGICAL LANDMARKS

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| Types of activity | <p>Teaching Techniques / learning materials and resources: presentation, interactive course, work group, learning through problems / projects, etc.</p> <p>In the case of special situations (state of alert, state of emergency, other types of states that can limit the physical presence of persons), the activity can be held using online platforms supported by the Faculty/ University.</p> <p>The online educational process will be adapted to ensure the achievement of all the objectives referred in the discipline sheet.</p> |
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| Course | The following methods are used: lecture, debate, problem-solving. |
| Practical work | The following methods are used: practical applications, case study, projects. |
| Individual study | Before each course and each practical works. For online use: lecture, debate, questioning based on materials given before. |

11. RECOVERY PROGRAM

| | No. absences that can be recovered | Location of deployment | Period | In charge | Scheduling of topics |
|---|------------------------------------|---|-------------------------------|-----------------|-------------------------------|
| Absences recoveries | 3 | Oncology Hospital "Sf. Nectarie", Caracal Street no. 109; Emergency Clinical County Hospital of Craiova, Department of Oncology – Lecture Room | The last week of the semester | Group Assistant | Chronologically, 2 themes/day |
| Consultations Schedule/ Students' Scientific Circle | 2 hours/ week/ teacher | Oncology Hospital "Sf. Nectarie", Caracal Street no. 109; Emergency Clinical County Hospital of Craiova, Department of Oncology – Lecture Room | Weekly | All teachers | Theme from that week |
| Program for poorly trained students | 2 hours/ week | Oncology Hospital "Sf. Nectarie", Caracal Street no. 109; Emergency Clinical County Hospital of Craiova, Department of Oncology – Lecture Room | Weekly | All teachers | Theme from that week |

12. ASSESMENT

| Activity | Types of assesment | Method of evaluation | Percentage from final grade |
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| Course | Formative assesment through essays, projects and surveys during the semester. Summative assesment during the exam. | Multiple Choice Questions Answering System (MCQ)/ short answer question | 55% |

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| Practical work | Formative assesment through Multiple Choice Questions Answering System (MCQ) or/and descriptive, projects, survey during the semester. Periodic assesment during the semester. Summative assesment during the exam. | Multiple Choice Questions Answering System (MCQ) simultaneously with the one from the course | 30% |
| Periodic assesment | | | 10% |
| Attendance at the course | | | 5% |
| Minimum performance standard | At least 50% for each component of the evaluation | | |
| 13. GUIDANCE AND COUNSELING PROGRAMS | | | |
| Professional guidance and counseling programs (2 hours/monthly) | | | |
| Scheduling the hours | Place of deployment | | In charge |
| Last Friday of each month | Oncology Hospital "Sf. Nectarie", Caracal Street no. 109/ Online; Emergency Clinical County Hospital of Craiova, Department of Oncology – Lecture Room/Online | | All teachers |

Endorsement date in the department: 28.09.2022

**Department Director,
Prof. Cristin VERE**

**Coordinator of study program,
Prof. Marius Eugen CIUREA**

**Discipline holder,
Associate Prof. Michael SCHENKER**