# DISCIPLINE SHEET

## 1. Study programme

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| 1.1. | "CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY BUCHAREST |
| 1.2. | FACULTY OF DENTISTRY |
| 1.3. | DEPARTMENT: II |
| 1.4. | DISCIPLINE : DENTAL AND GENERAL RADIOLOGY |
| 1.5. | STUDY DOMAIN: Health, sectoral regulated within the European Union |
| 1.6. | STUDY LEVEL: I (Bachelor's degree) and II (Master's degree) |
| 1.7. | STUDY PROGRAMME: DENTAL MEDICINE IN ENGLISH |

## 2. Discipline

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| 2.1. | Discipline name according to the study curriculum: RADIOLOGY - medical imaging | | | | |
| 2.2. | Discipline code: MD02S05EN | | | | |
| 2.3. | Discipline type (FD/SD/CD): SD | | | | |
| 2.4. | Discipline optionality (COD/ED/FAD): COD | | | | |
| 2.5. | Lectures tenure: Assoc.Prof.Dr.Epistatu Dragos | | | | |
| 2.6. | Practical classes / seminar tenure: Assoc.Prof.Dr.Epistatu Dragos, Assist.Prof.Dr.Constantinescu Sorin | | | | |
| 2.7. Year of study | II | 2.8. Semester | III | 2.9. Evaluation (E/C/V) | E |

## 3. Estimated total time (hours/ semester of teaching and training activity /individual study)

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|---|---|---|---|---|---|---|
| I. University training | | | | | | |
| 3.1. Number of hours per week | 2 | from which: | 3.2. lecture | 1 | 3.3. practical class/ seminar | 1 |
| 3.4. Total hours in the study curriculum | 28 | from which: | 3.5. lecture | 14 | 3.6. practical class/ seminar | 14 |
| II. Preparation/ individual study | | | | | | |
| Time distribution | | | | | | hours |
| Study of lecture materials, textbooks, books, study of the minimum recommended bibliography | | | | | | 16 |
| Additional documentation activity in the library, on online platforms | | | | | | 6 |
| Specific preparation activities for projects, practical classes, preparation of assignments, reports | | | | | | 2 |
| Preparation for presentations or evaluations, preparation for the final examination | | | | | | 4 |
| Tutoring activity | | | | | | 2 |
| Other activities | | | | | | 2 |
| 3.7. Total hours of individual study | | | | | | 32 |
| 3.8. Total hours per semester (3.4.+3.7.) | | | | | | 60 |
| 3.9. Number of credits | | | | | | 2 |

## 4. Prerequisites (where appropriate)

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| **4.1. curriculum** | ANATOMY I - The student must be familiar with elements of general anatomy and pathophysiology. |
| **4.2. proficiencies** | The existence of practical knowledge of examination for different apparatuses and systems. |

## 5. Conditions (where appropriate)

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| **5.1. for lecture activity** | Amphitheater with a minimum of 50 seats, PC or laptop, video projector. |
| **5.2. for practical class/ seminar activity** | Multidetector computed tomography (MDCT) scanner, MRI machine, laboratory session room with 40 seats, computer or laptop, negatoscope |

## 6. Learning outcomes*

| Knowledge | Skills | Responsibility and autonomy |
|---|---|---|
| **C 1. Identifying of imagistic methods used in medicine** | **A1. The ability to understand why the particular exploration method was used and what its advantages/disadvantages are** | **RA 1. Identify the roles and responsibilities of the physician using imaging exploration.** |
| **C 2. Concluding a radiological diagnosis** | **A 2. The ability to recognize physiological and pathological imaging aspects, describe them and understand the texts that describe them.** | **RA 2. Understanding the objectives to be achieved, the working times and the risks associated with an erroneous diagnosis.** |

## 7. Discipline objectives (correlated with learning outcomes)

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| **7.1. General objective** | **-familiarizing the student with the basic notions of radiological diagnosis.**<br>**- establishing radiological investigation protocols.** |
| **7.2. Specific objectives** | **- correlation of radiological diagnosis with the general therapeutic attitude** |

## 8. Contents

| 8.1. Lecture | Teaching methods | Observations |
|---|---|---|
| 1. Introductory course | Exposition of the material according to the analytical program, using multimedia means, Power Point presentations, didactic movies | Format with physical presence |
| 2. Radiological-imaging methods | | Format with physical presence |
| 3. Pulmonary and mediastinal radiography | | Format with physical presence |
| 4. Pulmonary pathology | | Format with physical presence |
| 5. Radiological imaging of the osteo-articular system | | Format with physical presence |

| | | |
|---|---|---|
| 6. Craniocerebral radiological imaging | | Format with physical presence |
| 7. Various pathology visible by imaging *(circulatory, urinary etc.)* | | Format with physical presence |
| **Recent bibliography:**<br>1. Notices from lectures and ptractical classes – updated every semester<br>2. Grant & Helms' Fundamentals of Diagnostic Radiology, 6e, 2024<br>3. Grainger & Allison's Diagnostic Radiology Essentials, 3e, 2024(2021) | | |
| **8.2. Practical classes/ seminar** | **Teaching methods** | **Observations** |
| 1. Types of radiological investigations, equipment, incidents | Demonstration with Multidetector Computer Tomography and Magnetic Resonance Imaging device. Interactive exposition of the material according to the analytical program, using multimedia means, Power Point presentations, didactic movies | Format with physical presence |
| 2. Thoracic radiological diagnosis | | Format with physical presence |
| 3. Cranio-cerebral radiological diagnosis | | Format with physical presence |
| 4. Computed tomography | | Format with physical presence |
| 5. Trauma and other general pathologies | | Format with physical presence |
| 6. Radiological diagnosis of bone pathology | | Format with physical presence |
| 7. Radiological diagnosis of medical and surgical emergencies | | Format with physical presence |
| **Recent bibliography:**<br>1. Notices from lectures and practical classes – updated every semester<br>2. Grant & Helms' Fundamentals of Diagnostic Radiology, 6e, 2024<br>3. Grainger & Allison's Diagnostic Radiology Essentials, 3e, 2024 | | |

**9. Assessment**

| **Activity type** | **9.1. Evaluation criteria** | **9.2. Evaluation methods** | **9.3. Percentage of final grade** |
|---|---|---|---|
| **9.4. Lecture** | **Requirements for grade 5:**<br>**- satisfactory theoretical knowledge regarding elements of radiological anatomy;**<br>**- correct expression of simple diagnoses.** | **Grid examination of the concepts presented in the lectures and practical classes** | **75%** |

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|---|---|---|---|
| | **Requirements for grade 10:**<br>**- thorough knowledge of radiological examination methods;**<br>**- correct formulation of diagnoses of low difficulty, description of pathological aspects in an x-ray image and possible diagnosis;**<br>**- good presentation of the theoretical notions learned** | | |
| **9.5. Practical classes/ seminar** | **Requirements for grade 5:**<br>**- satisfactory theoretical knowledge regarding elements of radiological anatomy;**<br>**- correct expression of simple diagnoses.**<br><br>**Requirements for grade 10:**<br>**- thorough knowledge of radiological examination methods;**<br>**- correct formulation of diagnoses of low/medium difficulty.** | **Practical assessment: oral seminar at each practical class.**<br>**The student is assessed both in terms of:**<br>**- theoretical knowledge (questions with oral answers on the subject discussed during the practical classes);**<br><br>**- interpretation of radiographs** | **25%** |
| **9.5.1. Individual project** (if any) | | | |
| **Minimum performance standard** | | | |
| **Minimal correlation between the possible condition, the involved organ and the radiological image** | | | |