**COURSE OUTLINE**

1. **GENERAL**

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| **SCHOOL** | School of Health Sciences | | | | |
| **ACADEMIC UNIT** | Faculty of Medicine | | | | |
| **LEVEL OF STUDIES** | PREGRADUATE | | | | |
| **COURSE CODE** | **ΙΑΕ501** | **SEMESTER** | | **7th** | |
| **COURSE TITLE** | RADIOLOGY I | | | | |
| **INDEPENDENT TEACHING ACTIVITIES** *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits* | | | **WEEKLY TEACHING HOURS** | | **CREDITS** |
| **LECTURES – GROUP DISCUSSIONS – STUDENT PRESENTATIONS** | | | **3** | | **5** |
|  | | | **25** | |  |
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| *Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (4).* | | |  | |  |
| **COURSE TYPE**  *general background,  special background, specialised general knowledge, skills development* | GENERAL BACKGROUMD | | | | |
| **PREREQUISITE COURSES:** | - | | | | |
| **LANGUAGE OF INSTRUCTION and EXAMINATIONS:** | GREEK | | | | |
| **IS THE COURSE OFFERED TO ERASMUS STUDENTS** | YES | | | | |
| **COURSE WEBSITE (URL)** | https://ecourse.uoi.gr/enrol/index.php?id=2156 | | | | |

1. **LEARNING OUTCOMES**

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| **Learning outcomes** | |
| *The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.*  *Consult Appendix A*   * *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area* * *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B* * *Guidelines for writing Learning Outcomes* | |
| Radiology plays a decisive and expanded role in the practice of modern clinical medicine. It encompasses a wide range of imaging techniques, such as X-rays, ultrasound, computed tomography, magnetic resonance imaging, digital angiography, and hybrid imaging, with the aim of both diagnosing and therapeutically managing diseases (e.g., embolization, thrombectomies, etc.).  Within the framework of this course, the fundamental principles and clinical applications of Radiology are taught, organized by systems or organs. In this way, morphological and functional information is provided, which is crucial for the diagnosis and therapeutic management of most diseases.  The goal of the course is to provide substantial and multifaceted education to students, enabling them to effectively apply Radiology in clinical practice. | |
| **General Competences** | |
| *Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?* | |
| *Search for, analysis and synthesis of data and information, with the use of the necessary technology*  *Adapting to new situations*  *Decision-making*  *Working independently*  *Team work*  *Working in an international environment*  *Working in an interdisciplinary environment*  *Production of new research ideas* | *Project planning and management*  *Respect for difference and multiculturalism*  *Respect for the natural environment*  *Showing social, professional and ethical responsibility and sensitivity to gender issues*  *Criticism and self-criticism*  *Production of free, creative and inductive thinking*  *……*  *Others…*  *…….* |
| -Search for, analysis and synthesis of data and information, using the necessary technologies  -Independent work  -Team work  - Promoting free, creative and inductive thinking  - Respect for diversity  -Production of new research ideas | |

1. **SYLLABUS**

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| **Lectures**  Basic Principles of Imaging Methods: X-rays and digital imaging, ultrasound, computed tomography, magnetic resonance imaging, hybrid imaging, and digital angiography.  Respiratory System: Normal chest, infections and interstitial lung diseases, lung neoplasms, mediastinal and pleural diseases.  Cardiovascular System: Heart failure and pulmonary embolism.  Pediatric Radiology: Diseases of the respiratory system and gastrointestinal tract.  Abdomen-Gastrointestinal System: Acute abdomen, diseases of the liver and bile ducts, pancreas, spleen, esophagus, stomach, small intestine, and colon.  Interventional Radiology: Diagnostic and therapeutic interventional procedures.  **Student Group Discussions**  **Student Projects/Presentations** |

1. **TEACHING and LEARNING METHODS - EVALUATION**

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| **DELIVERY** *Face-to-face, Distance learning, etc.* | The course is taught in a lecture format over 15 teaching weeks, combined with a five-week clinical and tutorial-based practical exercise (daily) in small student groups (rotation).  Students are fully integrated into the operation of the radiology department, attending the following sections: conventional radiology (X-rays, fluoroscopy, mammography), ultrasound, computed tomography, magnetic resonance imaging, and angiography. They acquire theoretical knowledge by attending daily lectures within the department, as well as participating in clinical-radiology meetings that include discussions on interesting cases. Additionally, they gain practical experience by observing imaging examinations and reporting processes. |
| **USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY** *Use of ICT in teaching, laboratory education, communication with students* | - Teaching using PowerPoint  - Posting information/teaching material to the e-course e-learning platform  - Show Educational Videos / Tutorials  <https://ecourse.uoi.gr/enrol/index.php?id=2156> |
| **TEACHING METHODS**  *The manner and methods of teaching are described in detail.*  *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.*  *The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS* | |  |  | | --- | --- | | ***Activity*** | ***Workload of each students group (two groups per semester)*** | | Lectures | 45 | | Student Group Discussions | - | | Workshop | - | | Five weeks daily laboratory-tutorial exercise (rotation) | 100 | | Total | ***145*** | |  |  | |
| **STUDENT PERFORMANCE EVALUATION**  *Description of the evaluation procedure*  *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other*  *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.* | **Language of evaluation**: Greek  Oral examination upon completion of the five-week clinical-tutorial exercise.  Oral examination at the end of each semester. |

1. **ATTACHED BIBLIOGRAPHY**

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| *Teaching - study material:*  - «Κλινική Ακτινολογία» των Δρεβελέγκα, Αργυροπούλου, Γουλιάμο, Καραντάνα, Κελέκη κ.α, ISBN: 9789606802386, Εκδόσεις Κωνσταντάρας 2012, κωδ. 22708651 (ΕΥΔΟΞΟΣ).  - «Μαθαίνοντας Ακτινολογία, Αναγνωρίζοντας τα Βασικά» του William Herring, ISBN : 9789606080029, Εκδόσεις Κωνσταντάρας, κωδ. 68394568 (ΕΥΔΟΞΟΣ). |