**COURSE OUTLINE**

1. **GENERAL**

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| **SCHOOL** | School of Health Sciences |
| **ACADEMIC UNIT** | Faculty of Medicine |
| **LEVEL OF STUDIES** | Undergraduate |
| **COURSE CODE** | **IAE607** | **SEMESTER** | **6th** |
| **COURSE TITLE** | **Healthcare-associated infections** |
| **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  | 2 | 2 |
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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* | Elective course (specialized background) |
| **PREREQUISITE COURSES:** | General knowledge of Microbiology I & II, Εpidemiology |
| **LANGUAGE OF INSTRUCTION and EXAMINATIONS:** | Greek |
| **IS THE COURSE OFFERED TO ERASMUS STUDENTS** | YES |
| **COURSE WEBSITE (URL)** | <http://ecourse.uoi.gr/enrol/index.php?id=225>  |

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*
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| **The aim of the Healthcare-Associated Infections (HAIs) course is to present students** the scope, the pathogenic factors and the transmission routes of hospital infections, as well as the latest developments in the field of healthcare epidemiology, prevention, and control of these infections. The students will focus on tools for investigation, management, risk factors, current and developing multifaceted strategies or bundles for the prevention of HAIs, which exhibit significant deterioration indicated by elevated morbidity and mortality rates, along with prolonged hospitalization duration and costs. They will also understand the proper prescription of antibiotics, strategies for monitoring antibiotic consumption and appropriate use, as well as the control of antimicrobial resistance and the prevention of its spread. **By the end of the course, students will be able to identify and differentiate HAIs, methods of surveillance, recording, treatment and, most importantly, prevention of HAIs,** as well as measures to limit the spread of antimicrobial resistance. |
| **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, analysis, and synthesis of data and information, using the necessary technologies• Adaptation to emergent situations due to epidemic outbreaks, epidemics, pandemics..• Decision-making• Work in an interdisciplinary environment• Respect for the natural environment• Promotion of free, creative, and inductive thinking |

1. **SYLLABUS**

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| * General information on healthcare-associated infections (HAIs): Definition, Sources and modes of transmission of infection.
* Types of Hospital-Acquired Infections Based on Location

- Surgical Site Infections (SSIs) - Bloodstream infections (BSIs) - Urinary Tract Infections (UTIs) - Ventilator-associated infections (VAP)… * Hospital Associated Infections in Specific Patient Groups
* Epidemiology and cost of Hospital Infections- Methods of recording, Surveillance indicators - Prevalence and incidence-Epidemics and their investigation
* Implementation of preventive measures - Hand hygiene
* Rational use of antibiotics - De-escalation of antibiotic therapy
* MDR Colonization, detection, susceptibility testing - Multidrug-resistant pathogens and measures to prevent their spread
* Molecular basis and modes of dissemination and spread of resistance
* The role of the Laboratory of Microbiology in the control of HAIs
* The role of the Clinician in the control of HAIs
* The role of the Hospital Infections Committee and the the Antibiotic Consumption and Rational Use Surveillance Committee
* Disinfectants-Biocides
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1. **TEACHING and LEARNING METHODS - EVALUATION**

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| **DELIVERY***Face-to-face, Distance learning, etc.* | In the classroom face to face with the students  |
| **USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY** *Use of ICT in teaching, laboratory education, communication with students* | * Lectures using PowerPoint
* Support of the learning process through e-course platform
* Presentation of educational videos on the correct implementation of preventive measures
* Communication with students via electronic means (email, Skype, social media) and through in person
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| **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* |

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| ***Activity*** | ***Workload of each students group***  |
| Lectures | 26 |
| Study preparation/Literature study | 16 |
| Non-guided study | 12 |
| Interactive teaching | 4 |
| Written examinations | 2 |
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| Course Total (30 hours of workload per credit) | 60 |
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| **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.* | - Presentation of a review-study project- Oral or written examination |

1. **ATTACHED BIBLIOGRAPHY**

*Teaching - study material*

1. BENNETT KAI BRACHMAN'S **Healthcare-Associated Infections**, (2η Εd.), 2024: William Jarvis

2. Additional bibliography (scientific articles, electronic manuals from international health organizations, useful health organization websites, etc.) is posted on the course's electronic page on the e-course platform.