



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

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|--|---|--|---------------------|--|---|--------------------------------|---|------------|---|
| Course Title | | Antibiotic Usage Policies and Infection Control | | | | | | | |
| Course Code | | HEK525 | | Couse Level | | Second Cycle (Master's Degree) | | | |
| ECTS Credit | 4 | Workload | 98 (<i>Hours</i>) | Theory | 2 | Practice | 2 | Laboratory | 0 |
| Objectives of the Course | | Having detailed knowledge about antibiotics and applying rational antibiotic usage principles | | | | | | | |
| Course Content | | Types of antibiotic and antimicrobial drugs: selective toxicity, classification and mechanisms; Antibiotic resistance: description, types and problems; Antibiotic resistant pathogens; Antibiotic efficacy, rational antibiotic use; The use of antibiotics in opportunistic infections | | | | | | | |
| Work Placement | | N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods | | | | Explanation (Presentation), Discussion, Case Study | | | | | |
| Name of Lecturer(s) | | Lec. Selcen ÖNCÜ | | | | | | | |

Assessment Methods and Criteria

| Method | Quantity | Percentage (%) |
|---------------------|----------|----------------|
| Midterm Examination | 1 | 40 |
| Final Examination | 1 | 60 |

Recommended or Required Reading

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| 1 | Antibiotics and Antibiotic Resistance by Ola Skold |
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| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|---|
| 1 | Theoretical | Types of antibiotic and antimicrobial drugs |
| 2 | Theoretical | Classification of antibiotics and effect mechanisms |
| 3 | Theoretical | Antibiotics that inhibit cell wall synthesis |
| 4 | Theoretical | Antibiotics acting on cytoplasmic membrane |
| 5 | Theoretical | Antibiotics inhibiting protein synthesis |
| 6 | Theoretical | Antibiotics effective against bacterial genome |
| 7 | Theoretical | Antiviral agents |
| 8 | Intermediate Exam | Midterm exam |
| 9 | Theoretical | Antifungal agents |
| 10 | Theoretical | Rational antibiotic use |
| 11 | Theoretical | Antibiotic resistance and mechanisms |
| 12 | Theoretical | Antibiotic susceptibility tests |
| 13 | Theoretical | Side effects and monitoring of antibiotics |
| 14 | Theoretical | Use of antibiotics in resistant microorganisms |
| 15 | Theoretical | Final exam |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|---------------------------------------|----------|-------------|----------|----------------|
| Lecture - Theory | 13 | 1 | 2 | 39 |
| Lecture - Practice | 13 | 1 | 2 | 39 |
| Midterm Examination | 1 | 9 | 1 | 10 |
| Board Examination | 1 | 9 | 1 | 10 |
| Total Workload (Hours) | | | | 98 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 4 |

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

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| 1 | Having knowledge about antibiotics, uses, side effects |
| 2 | To know and apply rational antibiotic usage principles |
| 3 | To know the classification of antibiotics |



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| 4 | To have knowledge about the mechanism of action of antibiotics |
| 5 | To have knowledge about the side effects of antibiotics |

Programme Outcomes (*Hospital Infection Control Interdisciplinary Master*)

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| 1 | Being knowledgeable in the field of hospital infection control and related scientific fields |
| 2 | To be able to use knowledge learned in hospital infection control research area and related science fields |
| 3 | Being knowledgeable about the methods and applications used in the field of hospital infection control |
| 4 | To be aware of the legal practices and details of hospital infection control |
| 5 | To be able to develop different strategies for hospital infection control |
| 6 | Designing and implementing trainings to inform the health personnel and the public in the field of hospital infection control and evaluating the results |
| 7 | To follow current researches in the field of hospital infection control and make critical evaluations |
| 8 | To be able to do team work in the field of hospital infection control, to work together with different disciplines to develop common strategies |
| 9 | To contribute to the solution of social, scientific, cultural and ethical problems in the field of hospital infection control and to support the development of these values |
| 10 | Being able to develop research and learning awareness throughout life and to keep information up-to-date |

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

| | L1 | L2 | L3 | L4 | L5 |
|-----|----|----|----|----|----|
| P1 | 5 | 5 | 5 | 5 | 5 |
| P2 | 5 | 5 | 5 | 5 | 5 |
| P3 | 5 | 5 | 5 | 5 | 5 |
| P4 | 5 | 5 | 5 | 5 | 5 |
| P5 | 5 | 5 | 5 | 5 | 5 |
| P6 | 5 | 5 | 5 | 5 | 5 |
| P7 | 5 | 5 | 5 | 5 | 5 |
| P8 | 5 | 5 | 5 | 5 | 5 |
| P9 | 5 | 5 | 5 | 5 | 5 |
| P10 | 5 | 5 | 5 | 5 | 5 |

