



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

| | | | | | | | | | |
|--|----|--|----------------------|--|---|--------------------------------|---|------------|---|
| Course Title | | Up to Date in Bacteriology | | | | | | | |
| Course Code | | MBTK630 | | Course Level | | Third Cycle (Doctorate Degree) | | | |
| ECTS Credit | 10 | Workload | 250 (<i>Hours</i>) | Theory | 3 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course | | The aim of this course is to follow the current developent in bacteriology by reading and discussing the original articles in scientific journals about bacteriology | | | | | | | |
| Course Content | | During these bacteriology courses original articles of predetermined scientific journals on bacteriology will be discussed. For this purpose all original articles in the latest issue of one of the total of 13 journals will be discussed each week. | | | | | | | |
| Work Placement | | N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods | | | | Explanation (Presentation), Discussion, Individual Study | | | | | |
| Name of Lecturer(s) | | Prof. Gamze BAŞBÜLBÜL | | | | | | | |

Assessment Methods and Criteria

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

Recommended or Required Reading

| | |
|---|------------------------------|
| 1 | Journal selected for lecture |
|---|------------------------------|

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|--|
| 1 | Theoretical | Journal of Bacteriology, Reading original articles in the latest issue |
| 2 | Theoretical | Journal of Microbial and Biochemical Technology, Reading original articles in the latest issue |
| 3 | Theoretical | Biodegradation, Reading original articles in the latest issue |
| 4 | Theoretical | Trials in Vaccinology, Reading original articles in the latest issue |
| 5 | Theoretical | Molecular Oral Microbiology, Reading original articles in the latest issue |
| 6 | Theoretical | Food Microbiology, Reading original articles in the latest issue |
| 7 | Theoretical | International Journal of Medical Microbiology, Reading original articles in the latest issue |
| 8 | Intermediate Exam | Midterm exam |
| 9 | Theoretical | Veterinary Microbiology, Reading original articles in the latest issue |
| 10 | Theoretical | Gut Microbes, Reading original articles in the latest issue |
| 11 | Theoretical | Journal of Medical Microbiology, Reading original articles in the latest issue |
| 12 | Theoretical | Journal of Medical Microbiology, Reading original articles in the latest issue |
| 13 | Theoretical | Nature biotechnology, Reading original articles in the latest issue |
| 14 | Theoretical | Environmental Microbiology, Reading original articles in the latest issue |
| 15 | Final Exam | Final exam |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|---------------------|----------|-------------|----------|----------------|
| Lecture - Theory | 13 | 0 | 3 | 39 |
| Assignment | 6 | 0 | 15 | 90 |
| Term Project | 3 | 0 | 4 | 12 |
| Reading | 5 | 0 | 4 | 20 |
| Individual Work | 13 | 0 | 5 | 65 |
| Quiz | 6 | 0 | 3 | 18 |
| Midterm Examination | 1 | 0 | 3 | 3 |



| | | | | |
|---|---|---|---|-----|
| Final Examination | 1 | 0 | 3 | 3 |
| Total Workload (Hours) | | | | 250 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 10 |
| *25 hour workload is accepted as 1 ECTS | | | | |

Learning Outcomes

| | |
|----|--|
| 1 | Be able to follow current subjects of bacteriology |
| 2 | Be able to read scientific articles |
| 3 | Be able to understand current subjects in biodegradation |
| 4 | Be able to follow current knowledge about vaccins |
| 5 | Be able to follow current knowledge about oral and dental bacteriology |
| 6 | Be able to follow current knowledge about food bacteriology |
| 7 | Be able to follow current knowledge about medical bacteriology |
| 8 | Be able to follow current knowledge about environmental bacteriology |
| 9 | Be able to follow current knowledge about microbiom |
| 10 | Be able to follow current knowledge about biotechnology |

Programme Outcomes (Molecular Biotechnology(English) Interdisciplinary Doctorate)

| | |
|----|---|
| 1 | Ability to identify, analyze and understand problems related to molecular biotechnology and finding valid conclusions with basic knowledge in biotechnology |
| 2 | Ability to appropriately use laboratories and their associated equipment as part of research and observation activities through various branches of sciences |
| 3 | Ability to understand and interpret biological processes at cell, tissue, organ, system and organism levels |
| 4 | Ability to decide and apply appropriate tools and techniques in biotechnological manipulation |
| 5 | Ability to comprehend fundamentals of genetics and molecular biology and carry out basic methods in relevant applications |
| 6 | Ability to apply the fundamentals of protein and DNA chemistry, and immunology to techniques in biotechnology |
| 7 | . Ability to understand and practice basics of applied biotechnology, with acquired knowledge on problem solving approaches |
| 8 | Ability to understand and interpret basics of molecular applications within medical, agriculture, veterinary and forensic sciences |
| 9 | Ability to perceive biological existence at the global and regional scales, together with comprehension of associated problems |
| 10 | Acquiring appropriate knowledge in the field of basic sciences to support perception, analysis and interpretation of biological facts, and ability to use and practice relevant methods for this goal |
| 11 | Ability to develop proficiency in laboratory management, including maintenance of an orderly work environment, inventory and ordering, and set up or maintenance of equipment |
| 12 | Ability to learn essential methods in microbiology and basic skills in a microbiology labortaory |
| 13 | Ability to demonstrate proficiency with standard techniques in liquid measurement, recombinant DNA technology, protein purification and identification, and cell culture |

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

| | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 |
|-----|----|----|----|----|----|----|----|----|----|-----|
| P1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| P2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| P3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| P4 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| P5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| P6 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| P7 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| P8 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| P9 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| P10 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| P11 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| P12 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| P13 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |

