

BDB205 - General Microbiology

| Course Name | Code | Term | Theory (hours/week) | Application (hours/week) | Laboratory (hours/week) | ECTS |
|--|---|--------------------|---------------------|--------------------------|-------------------------|------|
| GENERAL MICROBIOLOGY | BDB205 | 3. Semester/Autumn | 2 | 0 | 2 | 4 |
| Prerequisites | None | | | | | |
| Language of Instruction | Turkish | | | | | |
| Course Type | Compulsory | | | | | |
| Learning and Teaching Techniques of The Course | Expression | | | | | |
| Instructor(s) | | | | | | |
| Goal | Gaining basic knowledge in the field of microbiology. | | | | | |
| Learning Outcomes | 1. Describes the structure, metabolism and genetic characteristics of bacteria. 2. Understands the Normal Microbial Flora. 3. Categorizes antibiotics. 4. Comprehends important viruses, fungi and parasites in microbiology. 5. Antigen defines antibody structure and immune response mechanisms. 6. Defines sterilization, disinfection methods and hand hygiene. | | | | | |
| References | 1. Lippincott's Illustrated Reviews Microbiology, Third Edition. Harvey RA (eds). Anıg Ö (translation editor) Lippincott's Annotated Compilation of Textbooks: Microbiology. Nobel Medical Bookstore Tic. Ltd. Sti., 2017 İstanbul. 2. Levinson W (eds). Review of Medical Microbiology and Immunology. McGraw-Hill. Şener B, Esen B (translation editors). Lange Medical Books Medical Microbiology and Immunology. Detay Printing and Publishing Printing Services Singing. Tic. Ltd. Ltd. Sti., 2018, Ankara. 3. Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, Eighth Edition, 2015, Saunders / Elsevier. 4. Patrick R. Murray, Ken S. Rosenthal, and Michael A. Pfaller. Medical Microbiology, Eighth Edition, 2016, Elsevier. 5. Tünger A, Çavuşoğlu C, Korkmaz M. Asian Microbiology, Fourth Edition. 2005, Meta Printing Printing Services, İzmir. 6. US D. Basic Immunology and Serology. Hippocrates Bookstore, 2016, Ankara. | | | | | |

Course Outline Weekly:

| WEEKS | TOPICS |
|----------|--|
| 1. Week | History of Microbiology and General Properties of Microorganisms |
| 2. Week | General Properties of Bacteria, |
| 3. Week | Reproduction and Metabolism in Bacteria, Bacterial Genetics |
| 4. Week | Host Microorganism Relationship |
| 5. Week | Normal Microbial Flora |
| 6. Week | antimicrobials |
| 7. Week | General Features of Mushrooms |
| 8. Week | MIDTERM |
| 9. Week | General Features of Viruses |
| 10. Week | General Features of Parasites |
| 11. Week | Microbiological Sampling and Diagnostic Methods |
| 12. Week | Food Poisoning |
| 13. Week | Immune System, Natural and Acquired Immunity |
| 14. Week | Humoral and Cellular Immunity and Immunization |
| 15. Week | Sterilization, Disinfection and Hand Hygiene |

Student Work Load Table

| Activities | Number | Duration | Total Work Load |
|--|-----------------|----------|-----------------|
| Course Duration | 14 | 3 | 42 |
| Laboratory | 14 | 1 | 14 |
| Practice | | | |
| Field Study | | | |
| Study Time Of Outside Of Class (Pre-Study, Practice, Etc.) | | | |
| Presentations (Video shoot/Poster preparation/Oral presentation, Etc.) | | | |
| Seminars | 1 | 12 | 12 |
| Project | | | |
| Case study | | | |
| Role playing, Dramatization | | | |
| Writing articles, Critique | | | |
| Time To Prepare For Midterm Exam | 1 | 12 | 12 |
| Final Exam Preparation Time | 1 | 20 | 20 |
| Total Work Load (hour) / 25(s) | 100/25=4 | | |
| ECTS | 4 | | |

Evaluation System

| Mid-Term Studies | Number | Contribution |
|---|--------|--------------|
| Midterm exams | 1 | 50% |
| Quiz | | |
| Laboratory | | |
| Practice | | |
| Field Study | | |
| Course Internship (If There Is) | | |
| Homework's | 1 | 50% |
| Presentation and Seminar | | |
| Project | | |
| Other evaluation methods | | |
| Total Time To Activities For Midterm | 2 | 100 |
| Final works | | |
| Final | 1 | 100% |
| Homework | | |
| Practice | | |
| Laboratory | | |
| Total Time To Activities For Midterm | | 100 |
| Contribution Of Midterm Studies On Grades | | 40% |
| Contribution Of Final Exam On Grades | | 60% |
| Total | | 100 |

The relationship between learning outcomes and the program qualifications of the courses

| Program Qualifications | Learning Outcomes | | | | | |
|--|-------------------|-------|-------|-------|-------|-------|
| | L.O.1 | L.O.2 | L.O.3 | L.O.4 | L.O.5 | L.O.6 |
| 1. Enables the students to use theoretical knowledge based on basic and social sciences in practice. | 4 | 4 | 3 | 2 | 2 | 5 |
| 2. Has the ability to use equipments and information Technologies required for the professional practice efficiently. | 4 | 4 | 1 | 1 | 2 | 3 |
| 3. Knows his rights, duties and responsibilities towards the society, colleagues, and other professions, individuals and patients, and learns how to behave in harmony with the professional ethical rules. | 1 | 1 | 1 | 2 | 1 | 3 |
| 4. When confronted with problems within any field of Nutrition and Dietetics, has the ability to observe, diagnose, assess, report and come up with solutions thanks to their up-to-date knowledge and skills. | 4 | 3 | 1 | 2 | 3 | 3 |
| 5. Gains efficient working skills based on the principles of effective communication, responsibility, solution-oriented working in disciplinary and interdisciplinary conditions. | 2 | 1 | 1 | 1 | 1 | 3 |
| 6. Has the ability to make a plan for a research individually or as part of a team, make experiments, collect and analyze the data, interpret and write a report by using theoretical / practical knowledge and skills gained in the field of Nutrition and Dietetics. | 4 | 3 | 1 | 3 | 3 | 4 |
| 7. Develops suggestions for healthy/sick individuals and those at risk considering their lifelong diet. | 4 | 4 | 2 | 3 | 2 | 5 |
| 8. Gains knowledge to contribute to the diet plans and politics to be developed based on the needs of the individuals and the society. | 2 | 4 | 1 | 1 | 1 | 5 |
| 9. Improves themselves by following the latest advances in their profession nationally and internationally, and acquires awareness in lifelong learning. | 2 | 3 | 1 | 1 | 2 | 4 |

Contribution to the level of proficiency: 1. Lowest, 2. Low / Medium, 3. Average, 4. High, 5. Excellent