**COURSE IDENTIFICATION FORM**

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| Course Unit Title and Code: SM-5067 Isolation of bacteria, identification and antibiotic sensitivity test | Programme Title: Fisheries Post Graduate |
| Semester | The Methods of Education (ECTS) |  |
| Theoretical | Practice | Lab. | Project Work | Other | Total | ECTS |
|  | 2 | 2 | - |  |  | 4 | 6 |
| Language of Course Unit | Turkish |
| Type of Course Unit (Compulsory/Elective) | Elective |
| Preconditions | None |
| Name of Lecturer | Assoc. Dr. Engin ŞEKER |
| Class | Post Graduate |
| Objectives of Course Unit | The aim of this course is to teach basic knowledge about bacteria, bacteria’s isolation, identification and antibiotic sensitivity |
| Teaching Techniques | Lecture, question and answer, discussion, brain storming, individual work |
| Course Unit Contents | Teaching bacteria systematic, bacteria anatomy and morphology, reproduction in bacteria, genetic substance transfer, bacterial infection mechanism, get skills about defining reproducing bacteria, making antibiotic sensitivity test, making bacteriological analysis |
| Recommended or Required Reading | Arda, M. (2001) Temel Mikrobiyoloji. Medisan Yayınları, AnkaraKılıçturgay K, Gökırmak F, Töre O, Gedikoğlu S, Göral G, Helvacı S. Klinik Mikrobiyoloji. 2nd ed. Güneş ve Nobel Kitapevleri: Bursa (1994)Bilgehan H. Özel Bakteriyoloji ve Bakteri Enfeksiyonları. 8th ed. Barış Yayınları Fakülteler Kitapevi: İzmir (1993) |
| Learning Outcomes | 1. Defines bacteria systematic, bacteria anatomy and morphology

2. Defines reproducing bacteria3. Makes antibiotic sensitivity test4. Learns steps to make bacteriological analysis |
| Weekly Detailed Course Contents | 1. Microscopic and macroscopic characteristics of bacteria
2. Anatomic and chemical structure of bacteria. Feeding of bacteria
3. Pathogenic characteristics of bacteria(infection mechanism)
4. Reproduction in bacteria
5. Identify reproducing bacteria
6. Identify reproducing bacteria
7. Mid-term exam
8. Selective and distinguishing media(feedlot)
9. Preparing bacteria preparate and using simple staining technique,Gram staining technique
10. Spore staining technique in bacteria
11. Defining total cell number, determining obtained data and drawing graph
12. Making bacteriological analysis
13. Making bacteriological analysis
14. Antibiotic sensitivity test
15. Antibiotic sensitivity test
16. Antibiotic sensitivity test
17. Final exam
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| The contribution to Career Training of Course Unit | Mathematic and Basic Science | Vocational Education | General Education |
|  |  | 6 |  |

### RELATIONSHIPS BETWEEN LEARNING OUTCOMES OF COURSE UNIT AND PROGRAMME OUTCOMES OF FISHERIES ENGİNNER

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|  | PROGRAMME OUTCOMES OF FISHERIES ENGINEER | Contribution Level1 Low2: Medium 3: High |
| 1 | Deepens and improves the information based on university education up to expertise level in Fishing and Seafood Processing Technology.  | 3 |
| 2 | Collects, assesses and publishes data related to their expertise area, cares public, scientific, cultural and ethical values during data collection. | 3 |
| 3 | Solves problems by using problem-solving and suitable methods, establishes cause and effect relationships in the process in his/her expertise. | 3 |
| 4 | Develops a positive attitude towards lifelong learning.  | 1 |
| 5 | Ability for independent study in their area of expertise. | 2 |
| 6 | Obtaining and using literature in their area of expertise. | 0 |
| 7 | Written, verbal and visual convey of their studies and developments in their area of expertise. | 0 |
| 8 | Comprehends interaction of expertise area in relation to interdisciplinary relationships.  | 2 |

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| Learning Outcomes of Course Unit | Programme Outcomes |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | 3 |  | 3 | 2 |  |  |  |  |
| 2 | 3 |  | 3 | 3 |  |  |  | 3 |
| 3 | 3 | 2 | 3 | 3 |  |  |  | 1 |
| 4 | 3 | 3 |  | 3 |  |  | 2 | 2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total PO | 12 | 5 | 9 | 11 | 0 | 0 | 2 | 6 |
| Total/12 | %100 | %42 | %75 | %92 | %0 | %0 | %17 | %50 |
| Contribute level | 3 | 2 | 3 | 3 | 0 | 0 | 1 | 2 |

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| Assoc. Dr. Engin ŞEKER | 12.02.2024 |