



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

|  |   |                             |                      |                            |   |                                |   |            |   |
|--|---|-----------------------------|----------------------|----------------------------|---|--------------------------------|---|------------|---|
| Course Title                                     |   | Molecular Biology of Cancer |                      |                            |   |                                |   |            |   |
| Course Code                                      |   | TIB522                      |                      | Course Level               |   | Second Cycle (Master's Degree) |   |            |   |
| ECTS Credit                                      | 5 | Workload                    | 123 ( <i>Hours</i> ) | Theory                     | 2 | Practice                       | 0 | Laboratory | 0 |
| Objectives of the Course                         |   |                             |                      |                            |   |                                |   |            |   |
| Course Content                                   |   |                             |                      |                            |   |                                |   |            |   |
| Work Placement                                   |   | N/A                         |                      |                            |   |                                |   |            |   |
| Planned Learning Activities and Teaching Methods |   |                             |                      | Explanation (Presentation) |   |                                |   |            |   |
| Name of Lecturer(s)                              |   | Prof. Mehtap KILIÇ EREN     |                      |                            |   |                                |   |            |   |

### Assessment Methods and Criteria

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

### Recommended or Required Reading

|   |   |
|---|---|
| 1 | NCBI pubmed and recent medical publications |
|---|---|

| Week | Weekly Detailed Course Contents |   |
|------|---------------------------------|---|
| 1    | Theoretical                     | Introduction to Cancer biology                    |
| 2    | Theoretical                     | Epidemiology of Cancer                            |
| 3    | Theoretical                     | Cancer Genetics                                   |
| 4    | Theoretical                     | Cell cycle control                                |
| 5    | Theoretical                     | Oncogenes   |
| 6    | Theoretical                     | Growth factors                                    |
| 7    | Theoretical                     | General characteristics of neoplastic cell        |
| 8    | Theoretical                     | Malignant transformation of cell (Midterm)        |
| 9    | Theoretical                     | Mutation accumulation theory of cancer            |
| 10   | Theoretical                     | Neoplastic cell and microenvironment              |
| 11   | Theoretical                     | Altering cellular functions during carcinogenesis |
| 12   | Theoretical                     | Cell surface receptors and cell signaling         |
| 13   | Theoretical                     | Cancer metabolism                                 |
| 14   | Theoretical                     | Presentation and Discussion                       |
| 15   | Final Exam                      | Final Exam  |

### Workload Calculation

| Activity                              | Quantity | Preparation | Duration | Total Workload |
|---------------------------------------|----------|-------------|----------|----------------|
| Lecture - Theory                      | 13       | 7           | 2        | 117            |
| Midterm Examination                   | 1        | 1           | 1        | 2              |
| Final Examination                     | 1        | 2           | 2        | 4              |
| Total Workload (Hours)                |          |             |          | 123            |
| [Total Workload (Hours) / 25*] = ECTS |          |             |          | 5              |

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

|   |   |
|---|---|
| 1 | 1. Learning current medical biology topics                      |
| 2 | 2. Learning cancer biology at molecular level                   |
| 3 | Improving research abilities to learn about recent developments |
| 4 |   |



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**Programme Outcomes** (*Medical Biology Master*)

|   |  |
|---|--|
| 1 | To acquire fundamental knowledge on medical biology field  |
| 2 | To gain expertise on molecular biology techniques          |
| 3 | To utilize molecular biology techniques                    |
| 4 | To be able to construct and conduct a research project     |
| 5 | To be able to follow and interpret scientific advancements |

**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  | 3  | 2  | 3  |
| P2 | 1  | 1  | 1  | 2  | 1  |
| P3 | 1  | 1  | 1  | 2  | 1  |
| P4 | 1  | 1  | 1  | 3  | 1  |
| P5 | 3  | 3  | 5  | 5  | 5  |

