



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

| | | | | | | | | | |
|--|---|-----------------------------|------------|----------------------------|---|--------------------------------|---|------------|---|
| Course Title | | Scientific Research Methods | | | | | | | |
| Course Code | | TIB642 | | Course Level | | Third Cycle (Doctorate Degree) | | | |
| ECTS Credit | 2 | Workload | 47 (Hours) | 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) | | | | | | | | | |

Assessment Methods and Criteria

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

Recommended or Required Reading

| | |
|---|---|
| 1 | 1. A Beginners Guide to Scientific Method – Stephen S Carey - Wadsworth Publishing; 4 edition (January 1, 2011) |
|---|---|

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|--|
| 1 | Theoretical | What is science and scientific method |
| 2 | Theoretical | Scientific method in daily life |
| 3 | Theoretical | Observation |
| 4 | Theoretical | Problems of observation and proving based on observation |
| 5 | Theoretical | Explanation, Theory and Hypothesis |
| 6 | Theoretical | Correlation and Causation |
| 7 | Theoretical | Rival explanations and Conflicts |
| 8 | Intermediate Exam | Midterm Exam |
| 9 | Theoretical | Experimental science |
| 10 | Theoretical | Experiment design and experimental controls |
| 11 | Theoretical | Incorrect design of experiments |
| 12 | Theoretical | Prejudice and Bias |
| 13 | Theoretical | Causal Studies |
| 14 | Theoretical | Writing scientific reports and scientific presentation |
| 15 | Final Exam | Final Exam |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|---------------------------------------|----------|-------------|----------|----------------|
| Lecture - Theory | 13 | 1 | 2 | 39 |
| Midterm Examination | 1 | 2 | 2 | 4 |
| Final Examination | 1 | 2 | 2 | 4 |
| Total Workload (Hours) | | | | 47 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 2 |

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

| | |
|---|--|
| 1 | |
| 2 | |
| 3 | |
| 4 | |



5

Programme Outcomes (*Medical Biology Doctorate*)

| | |
|---|--|
| 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 | 2 | 2 | 2 | 2 | 2 |
| P2 | 3 | 3 | 2 | 4 | 3 |
| P3 | 3 | 4 | 4 | 3 | 3 |
| P4 | 4 | 4 | 3 | 3 | 3 |
| P5 | 3 | 3 | 3 | 3 | 4 |

