# AYDIN ADNAN MENDERES UNIVERSITY
# COURSE INFORMATION FORM

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Course Title | Underwater High Altitude and Space Physiology | | | | | | | | |
| Course Code | TFZ618 | | Couse Level | Third Cycle (Doctorate Degree) | | | | | |
| ECTS Credit | 2 | Workload | 56 *(Hours)* | Theory | 1 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course | To understand aviation high altitude and space physiology; Effects of low oxygen pressure on the body; Effects of accelarotory forces on the body in aviation and space physiology; Physiology of deep sea diving and other hyperbaric conditions; Effect of high partial pressures of gases on the body; Physical problems in diving; Special physiological problems in submarines. | | | | | | | | |
| Course Content | aviation high altitude and space physiology; Effects of low oxygen pressure on the body; Effects of accelarotory forces on the body in aviation and space physiology; Physiology of deep sea diving and other hyperbaric conditions; Effect of high partial pressures of gases on the body; Physical problems in diving; Special physiological problems in submarines. | | | | | | | | |
| Work Placement | N/A | | | | | | | | |
| Planned Learning Activities and Teaching Methods | Explanation (Presentation), Discussion | | | | | | | | |
| Name of Lecturer(s) | | | | | | | | | |

**Assessment Methods and Criteria**

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

**Recommended or Required Reading**

| | |
|---|---|
| 1 | Guyton Physiology |

| Week | Weekly Detailed Course Contents | |
|---|---|---|
| 1 | Theoretical | Aviation; high altitude and space physiology 1 |
| 2 | Theoretical | Aviation; high altitude and space physiology 2 |
| 3 | Theoretical | Low oxygen pressure effects on the body |
| 4 | Theoretical | Acceleration forces in aerospace physiology |
| 5 | Theoretical | Acceleration forces in aerospace physiology 2 |
| 6 | Theoretical | The effects of acceleration forces on the body in aerospace physiology 1 |
| 7 | Intermediate Exam | visa |
| 8 | Theoretical | The effects of acceleration forces on the body in aerospace physiology 2 |
| 9 | Theoretical | Deep-sea diver 1 |
| 10 | Theoretical | Deep-sea diver 2 |
| 11 | Theoretical | physiology of high-pressure processes 1 |
| 12 | Theoretical | physiology of high-pressure processes 2 |
| 13 | Theoretical | Effects of high partial pressurized gases on the body |
| 14 | Theoretical | Physical problems |
| 15 | Theoretical | Specific problems for submarines |
| 16 | Final Exam | Final |

**Workload Calculation**

| Activity | Quantity | Preparation | Duration | Total Workload |
|---|---|---|---|---|
| Lecture - Theory | 14 | 1 | 1 | 28 |
| Assignment | 4 | 5 | 1 | 24 |
| Midterm Examination | 1 | 1 | 1 | 2 |
| Final Examination | 1 | 1 | 1 | 2 |
| | | | Total Workload (Hours) | 56 |
| | | | [Total Workload (Hours) / 25*] = **ECTS** | 2 |

**25 hour workload is accepted as 1 ECTS*

| Learning Outcomes | |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |

| Programme Outcomes *(Physiology (Medical) Doctorate)* | |
|---|---|
| 1 | Has a deep and broad knowledge about the field and the interdisciplinary area related with the field through the achievements gained in undergraduate and professional levels. |
| 2 | Has the knowledge to create original ideas, analyze them and develop definition/product/diagnosis methods by using the knowledge gained in undergraduate and/or professional experience, when needed. |
| 3 | To learn the laws and regulations both national and international in the field of physiology. |
| 4 | To gain ability to apply the principles and fundamentals of scientific ethical rules. |
| 5 | Implements and defends institutional and practical information and abilities in accordance with the needs of the country and the world, and changes when necessary. |

**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 | 4 | 5 | 4 | 5 |
| P2 | 4 | 4 | 5 | 5 | 4 |
| P3 | 5 | 4 | 4 | 4 | 4 |
| P4 | 4 | 4 | 4 | 5 | 5 |
| P5 | 5 | 4 | 5 | 4 | 4 |