



**AYDIN ADNAN MENDERES UNIVERSITY**  
**GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  
**MATHEMATICS AND SCIENCE EDUCATION**  
**SCIENCE EDUCATION**  
**SCIENCE EDUCATION MASTER**  
**COURSE INFORMATION FORM**

Course Title	Biological Principals Of Ethology								
Course Code	İFB520			Course Level		Second Cycle (Master's Degree)			
ECTS Credit	8	Workload	200 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	This course is designed for MSc students and it covers the core issues of biological principals of ethology. Special features of biological principals of behaviour and changes in behaviour will be examined at this course.								
Course Content	Biological principals of of behaviour and learning, Evolution of behaviour, Brain and Creativeness								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)									

#### Assessment Methods and Criteria

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

#### Recommended or Required Reading

1	Demirsoy, Ali (1990). Yaşamın Temel Kuralları (Genel Biyoloji/Genel Zooloji). 3. Basım. Cilt-I/Kısım-II. Meteksan AŞ. 1-447.
2	Şahin, Yalçın (1995). Genel Biyoloji. I. Baskı. Bilim Teknik Yayınevi. 1-540.
3	Freeman, Scott ve Herron, Jon C (2002). Evrimsel Analiz. Palme Yayıncılık. 1-708.
4	Lewin, Roger (2004). Modern İnsanın Kökeni. 12. Basım. Tübitak Popüler Bilim Kitapları. 1-246.
5	Gould, James L ve Gould, Carol Grant (2005). Hayvan Zihni. 4. Basım. Tübitak Popüler Bilim Kitapları. 1-254.

#### Week Weekly Detailed Course Contents

Week	Weekly Detailed Course Contents
1	Theoretical Meeting, introduction to the course
2	Theoretical The origin of modern human
3	Theoretical The origin of modern human
4	Theoretical Development of ethology
5	Theoretical Biological principals of of behaviour and learning: -neural control
6	Theoretical -hormones
7	Theoretical -heredity and environment
8	Intermediate Exam MIDTERM
9	Theoretical -learning
10	Theoretical Evolution of behaviour: -adaptation and human behaviour
11	Theoretical -kin selection and social behaviour
12	Theoretical -an example of sexual dimorphism
13	Theoretical Logic and Language
14	Theoretical Human Niche; Newborns and Siblings
15	Theoretical Speaking, Understanding and Gramer; Brain and Creativeness
16	Final Exam TERM

#### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Assignment	5	10	0	50
Reading	5	9	0	45
Midterm Examination	1	10	2	12



Final Examination	1	20	3	23
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = ECTS				8
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	To be able to understand bases of behaviour and evolution.
2	To be able to acquire higher order thinking skills and their development.
3	To be able to understand biological behaviour theories.
4	To be able to integrate science technology concepts to biological concepts.
5	Behavioral pollution and on measures to increase awareness of individual and social

### Programme Outcomes (Science Education Master)

1	To be able to have an expert theoretical knowledge within the field of science education.
2	To be able to transfer expert knowledge gained in science education into various instructional environment.
3	To be able to integrate science education knowledge with the other disciplines and product functional knowledge
4	To be able to use information and communication technologies efficiently in conceptual learning
5	To be able to find scientific solutions to the problems in the field of science education
6	To be able to evaluate the knowledge critically in the field
7	To be able to participate in team projects in the science education field
8	To be able to adopt lifelong learning strategies to his/her studies
9	To be able to use at least one foreign language efficiently in oral and verbal communication
10	To be able to share national and international data in the field of science education
11	To be able to comprehend and evaluate science-technology-society and environment interactions
12	To be able to comprehends science under the ethical values and take account of ethical considerations
13	To be able to use scientific information in the other domains that is gained in the masters field and have the transfer skills
14	To be able to follow the current development in the science education field
15	To be able to develop strategical plans and evaluate them in the context of quality processes

### 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	5	5	5
P3	4	4	5	5	5
P6	3	3	5	5	5
P8	4	4	5	5	5

