AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Population and Community Ecology								
Course Code	BİO629		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	7	Workload	178 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	the purpose of this course is to ensure the students understanding the ecology of population and community								
Course Content	population concept, population size, population density, types and rate of population growth, mortality and fecundity rate, life tables, age structure and sex ratio of population, regulation of populations, Intraspecific and interspecific competition, predation, parasitism, community concept, trophic structure, dominance, ecological succession, food webs, biodiversity								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)	Prof. Fatih Mehmet ŞİMŞEK								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	1. Begon, M., 1. Mortimer,M., Thompson, D.J., (2000) Populatıon Ecology, Blackwell Science, ISBN-0-632-03478-5.
2	2. Morin, P. J,(1999) Community Ecology, Blackwell Science,ISBN-0-86542-350-4.
3	3. Kikkava, J., Anderson, D., (1986) Community Ecology: Pattern and Process, Blackwell Science,ISBN-0-86793-264-3.
4	4. Şişli, M.N., Çevrebilim Ekoloji, Yeni Fersa Matbaacılık, ISBN-975-94939-0-X

Week	Weekly Detailed Course Contents	
1	Theoretical	population concept
2	Theoretical	ecological niche
3	Theoretical	population size, population dynamics
4	Theoretical	population growth curves, population mortality and fecundity rate
5	Theoretical	nature of intraspecific competition, density-dependent population regulation
6	Intermediate Exam	interspecific competition
7	Theoretical	predation, parasitism
8	Intermediate Exam	midterm exam
9	Theoretical	community structure and concept
10	Theoretical	habitat selection
11	Theoretical	trophic structure
12	Theoretical	food webs
13	Theoretical	ecological succession
14	Theoretical	biodiversity and dominance
15	Final Exam	final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	2	3	65
Assignment	2	2	6	16
Land Work	5	2	7	45
Quiz	4	6	3	36
Midterm Examination	1	6	2	8

Final Examination	1	6	2	8
			Total Workload (Hours)	178
			[Total Workload (Hours) / 25*] = **ECTS**	7
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. the student is able to learn the concept of population
2	2. the student is able to learn the concept of community
3	3. the student is able to learn the properties of the population
4	4. the student is able to learn the properties of the community
5	5. the student is able to comprehend the ecology of populations and communities
6	6. the student is able to comprehend the importance of food webs in ecosystems

Programme Outcomes *(Biology Doctorate)*	
1	To have enough scientific background knowledge towards a specific study and research area
2	To have an ability to identify, evaluate and develop a solution for a problem on biological aspects
3	To be able to evaluate scientific observations and results of experiments using statistical analysis methods
4	To have basic skills in areas related to field of biological studies
5	To have the ability to develop cooperation with different disciplines with the high level of social communication required for studies
6	To have knowledge of technology and use of methods and means used in biological researches
7	To have an ethical understanding which will be a guide for their investigations and publications
8	For PhD; to have European Language Portfolio C1 general level language skill
9	To be able to present and discuss own research results in accordance with scientific discipline using technological tools in scientific research environments
10	To be able to detect and evaluate economic and social impacts of an own original research results
11	To be equipped with ability of carrying out independent study in biological field
12	To be able to publish at least one an international/national peer reviewed scientific paper and/or produce or interpret an original work related to biology in order to expand the frontiers of knowledge
13	To be able to develop new approaches or adaptations to be used in solving scientific and biological problems
14	To be able to develop new understanding and approaches in order to explain a new phenomenon or a biological event under investigation
15	To have abilities and experience to create new search area through inspiration gained from subject searched

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5	L6
P1	4	5	4	5	5	5
P2	5	5	4	5	4	4
P3	3	3	5	4	3	3
P4	5	5	4	4	4	4
P5	5	5	5	4	4	4
P6	5	5	5	5	5	5
P7	5	5	5	5	5	5
P8	2	1	1	1	2	1
P9	1	1	1	1	2	2
P10	1	2	2	3	2	2
P11	5	5	5	5	5	5
P12	5	5	5	4	4	4
P13	2	2	2	2	2	1