AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Scientific Research and Publication Ethics						
Course Code	VFZ636		Couse Level	Third Cycle (Doctorate Degree)			
ECTS Credit	2	Workload	50 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Learning and adoption of ethical rules regarding to planning and conducting of scientific research and to evaluation of the results and publishing process						
Course Content	Ethical principles in the planning of scientific work, selection and number of test subjects, execution of the work, evaluation of results and in process of publication, ethical rules about animal experiments, ethical violations, ethics committee applications						
Work Placement	N/A						
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study, Problem Solving						
Name of Lecturer(s)							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	38
Final Examination	1	60
Quiz	2	1
Term Assignment	1	1

Recommended or Required Reading

1	Scientific Research: Design, Writing and Publishing Techniques
2	Handbook of Laboratory Animal Science, Second Edition Volume II, AnimalModels. Eds; Jann Hau; Gerald L. Van Hoosier, Jr. CRC Press, 2003, ISBN: 084931086-5
3	International Researches, Fundamental Dilemmas in Research Ethics and Ethics Committees
4	The Ethics of Animal Research: Exploring the Controversy Ed; Jeremy R. Garrett MIT Press, April 2012

Week	Weekly Detailed Course Contents	
1	Theoretical	The history of ethical rules in biomedical research
2	Theoretical	Welfare of Experimental Animals
3	Theoretical	Pain and stress conditions and euthanasia in experimental animals
4	Theoretical	Experimental Models
5	Theoretical	Planning of research, selection of test subject and determination of sample size
6	Theoretical	Requirements for testing the hypothesis, choice of statistical analysis
7	Theoretical	Research ethics problems
8	Theoretical	Midterm
9	Theoretical	The Types of Scientific Research
10	Theoretical	General ethical rules regarding to publication of data
11	Theoretical	Reference searching and using
12	Theoretical	Scientific misconduct, publication ethics violations
13	Theoretical	Ownership of scientific ideas and findings (Patent)
14	Theoretical	Sided Broadcast, Editorial Ethics
15	Theoretical	Ethics Committee Application Process

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Term Project	1	5	1	6
Quiz	2	1	1	4
Midterm Examination	1	4	1	5

Final Examination	1	6	1	7
		Total Workload (Hours)		50
		[Total Workload (Hours) / 25*] = **ECTS**		2

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Learn the rules of ethics in the planning and execution of scientific work
2	Learn how to evaluate scientific data with appropriate statistical methods
3	Learn ethical rules to be followed in animal experiments
4	To have knowledge about research and publications violations
5	To have information about ethics committee applications

Programme Outcomes *(Physiology (Veterinary Medicine) 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	Is knowledgeable about theories and practices in methodological and scientific research methods to run an independent research
4	Excels in the laboratory, clinical and similar fields by using the theoretical and practical information gained in former education, and has the ability to create solutions in related fields
5	Designs and develops scientific methodology for the advanced level/newly defined/emerged problems about the field
6	Excels in the known scientific methods in the field for the advanced level/ newly defined/emerged problems
7	Designs unique researches and implements independently
8	Analyzes, synthesizes and evaluates the new ideas in related fields by using critical thinking
9	Plans, creates teams and carries out the interdisciplinary research projects in order to create solutions to the known/newly defined problems
10	Joins to congresses, panels, symposiums, workshops, seminars, article discussions and problem solving sessions in different disciplines, and exchanges information with the other professionals to contribute to the solutions
11	Broadens the borders of scientific information by publishing scientific articles in national and/or international peer-reviewed journals
12	Creates new ideas and methods to contribute to the technological, social and cultural progress, or to help the development of information society by using the theoretical, practical, independent research, abilities responsibly
13	Designs and implements social projects with the awareness of creating an information society
14	Compiles and interprets any type of data (field observation, scientific knowledge etc.) in accordance with the aims
15	Develops and uses strategies about related topics with the field
16	Implements and defends institutional and practical information and abilities in accordance with the needs of the country and the world, and changes when necessary
17	Follows up and uses all the updates about the field (scientific information, legislations etc.), and has the qualification to change them
18	Adopts lifelong learning as a principle and acknowledges that the information gained through research is the most valuable gain

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	4	4	4	4	4
P2	4	4	4	4	4
P3	4	4	4	4	4
P4	4	4	4	4	4
P5	4	4	4	4	4
P6	4	4	4	4	4
P7	3	3	3	3	3
P8	5	5	5	5	5
P9	3	3	3	3	3
P10	4	4	4	4	4
P11	5	5	5	5	5
P12	3	3	3	3	3
P13	2	2	2	2	2

P14	5	5	5	5	5
P15	5	5	5	5	5
P16	5	5	5	5	5
P17	5	5	5	5	5
P18	5	5	5	5	5