



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		RIA and Application Fields							
Course Code		VBY642		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	4	Workload	100 ( <i>Hours</i> )	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		Devices to teach the principle of RIA, show areas of use, ability to give practical application of theoretical knowledge							
Course Content		The working principle of the IUD, antigen, antibody dilution standard curve preparation. Quantitative RIA techniques, and evaluation of the fields used teknikleri, kullanıldıkları alanları ve sonuçların değerlendirilmesi							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Individual Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Quiz	2	10
Assignment	2	10

### Recommended or Required Reading

1	Tıbbi Biyokimya Laboratuvarı
2	Biyokimyada Araştırma Yöntemleri

Week	Weekly Detailed Course Contents	
1	Theoretical	General information
	Practice	Homework control
2	Theoretical	Historical development
	Practice	Presentation devices
3	Theoretical	Technical specifications
	Practice	Preparation of implementation plan
4	Theoretical	Sources of error
	Practice	Tools and equipment used in the preparation
5	Theoretical	The principle of RIA devices
	Practice	Preparation of precipitates
6	Theoretical	Areas of application
	Practice	Hormone analysis
7	Theoretical	Advantages
	Practice	Hormone analysis
8	Practice	Hormone analysis
	Intermediate Exam	Midterm exam
9	Theoretical	Disadvantages
	Practice	Hormone analysis
10	Theoretical	Criteria for accuracy and security devices
	Practice	Hormone analysis



11	Theoretical	Studies by RIA
	Practice	Preparation of the calibration curve
12	Theoretical	Radioactivity
	Practice	Waste disposal
13	Theoretical	Radiation measurement techniques
	Practice	Evaluation of Results
14	Theoretical	Removal of radioactive substances
	Practice	Discussion
15	Theoretical	Work safety
	Practice	Homework control
16	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	14	0	2	28
Assignment	2	5	1	12
Laboratory	2	2	3	10
Quiz	2	5	1	12
Midterm Examination	1	8	1	9
Final Examination	1	14	1	15
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = <b>ECTS</b>				4

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	To grasp the principle of one-RIA devices
2	Having a basic knowledge of the technical characteristics of the devices
3	An ability to win on the device application
4	To have information about the removal of radioactive substances
5	To learn the advantages and disadvantages of RIA

### Programme Outcomes (Biochemistry (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	5			5	5
P2	5				
P3	5	5		5	5
P4			5		
P5			5	5	5
P7	4				
P10			5		
P12	4	4		4	4
P15	4				
P17	4			4	4

