



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Vitamins and Minerals							
Course Code		BYK531		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	125 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		To examine the biochemical processes of micronutrients (vitamins and minerals) in the body							
Course Content		Vitamins and minerals, effects on metabolism and biological functions							
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	Fundamentals of Biochemistry H.P.Gajera, S.V.Patel, B.A.Golakiya
2	Biochemistry by lehninger

Week	Weekly Detailed Course Contents	
1	Theoretical	Course Description, Introduction to Biochemistry of Vitamins and Minerals
2	Theoretical	Biochemistry of Vitamins I: Thiamine, Riboflavin and Niacin
3	Theoretical	Biochemistry of Vitamins II: B6 and B12
4	Theoretical	Biochemistry of Vitamins III: Folate and Choline
5	Theoretical	Biochemistry of Vitamins IV: Biotin and Pantothenic acid
6	Theoretical	Biochemistry of Vitamins V: Vitamin C
7	Practice	Practices
8	Intermediate Exam	Quiz
9	Theoretical	Biochemistry of Vitamins V: Vitamins A and D
10	Theoretical	Biochemistry of Vitamins VI: Vitamin E and K
11	Theoretical	Biochemistry of Minerals I: Calcium, Phosphorus and Magnesium
12	Theoretical	Biochemistry of Minerals III: Iron
13	Theoretical	Biochemistry of Minerals IV: Zinc, Copper and Sulfur
14	Theoretical	Biochemistry of Minerals V: Iodine, Selenium, Manganese, Fluorine and Molybdenum
15	Practice	Practices
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	12	1	3	48
Lecture - Practice	2	1	3	8
Assignment	10	1	5	60
Individual Work	1	2	7	9
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to define the basic concepts of vitamins and minerals
2	To be able to summarize the role of micronutrients in chemical events in the body and their importance in energy metabolism



3	To be able to express the metabolism and functions of vitamins and minerals in the body
4	To be able to explain the clinical conditions in vitamin and mineral deficiencies
5	To have information about nutrition related metabolic disorders

Programme Outcomes (Biochemistry (Medical) Master)

1	To have basic theoretical knowledge about biochemistry and to help understanding biochemistry
2	To have the basic laboratory knowledge, apparatus and methods used in biochemistry
3	Analysis: To be able to analyze information critically
4	Synthesis: To be able to synthesize and adapt the knowledge in the field from different directions
5	Evaluation: To critically evaluate research in the field

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
P2	4	5	5	5	5
P3	5	5	4	4	5
P4	4	4	5	5	4
P5	5	5	4	5	5

