



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

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|--|---|---|------------|--|---|--------------------------------|---|------------|---|
| Course Title | | Kidney Function Tests | | | | | | | |
| Course Code | | VBY522 | | Couse Level | | Second Cycle (Master's Degree) | | | |
| ECTS Credit | 3 | Workload | 72 (Hours) | Theory | 1 | Practice | 2 | Laboratory | 0 |
| Objectives of the Course | | To learn and interpret tests of renal function and renal function | | | | | | | |
| Course Content | | Renal function, causes and consequences of loss of function, metabolism of urea and creatinine, glomerular function tests, tubular function tests, determination of urinary protein and urinary enzymes | | | | | | | |
| Work Placement | | N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods | | | | Explanation (Presentation), Discussion, Individual Study | | | | | |
| Name of Lecturer(s) | | Prof. Pınar Alkım ULUTAŞ | | | | | | | |

Assessment Methods and Criteria

| Method | Quantity | Percentage (%) |
|-------------------|----------|----------------|
| Final Examination | 1 | 100 |

Recommended or Required Reading

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| 1 | Karagül H., Altıntaş A., Fidancı U.R., Sel T.(2000) Klinik Biyokimya. Medisan Yayınevi ANKARA. |
| 2 | Kaplan L.A, Pesce A.J, KAZmierczak S.C. Clinical chemistry. Mosby. U.S.A. |

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|---|
| 1 | Theoretical | Overview to the renal function |
| 2 | Theoretical | Regulatory and endocrine functions of the kidney |
| 3 | Theoretical | Metabolic and excretory functions of the kidney |
| 4 | Theoretical | Glomerular function tests: serum or plasma creatinine levels, plasma urea level |
| 5 | Theoretical | Metabolism of urea, urea removal |
| 6 | Theoretical | Metabolism of creatine, creatinine removal |
| 7 | Theoretical | Serum urea and creatinine measurement and interpretation |
| 8 | Theoretical | Midterm exam |
| 9 | Theoretical | Proximal and distal tubular function |
| 10 | Theoretical | Urine osmolarity and concentration tests |
| 11 | Theoretical | Plasma tests and the use of radiochemicals |
| 12 | Theoretical | Proteinuria |
| 13 | Theoretical | Determination of urinary protein |
| 14 | Theoretical | Urine protein / creatinine ratio. Urinary enzymes |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|---------------------------------------|----------|-------------|----------|----------------|
| Lecture - Theory | 14 | 0 | 1 | 14 |
| Lecture - Practice | 14 | 0 | 2 | 28 |
| Term Project | 1 | 5 | 0 | 5 |
| Reading | 2 | 5 | 0 | 10 |
| Quiz | 2 | 4 | 1 | 10 |
| Midterm Examination | 1 | 2 | 1 | 3 |
| Final Examination | 1 | 1 | 1 | 2 |
| Total Workload (Hours) | | | | 72 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 3 |

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

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|---|---|
| 1 | To be able to comprehend renal function |
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| 2 | To be able to comprehend the metabolism of urea and creatinine. |
| 3 | To be able to make and interpret the measurement of urea and creatinine |
| 4 | To be able to comprehend and interpret the proximal and distal tubular functions |
| 5 | To be able to comprehend Urine concentration tests, urine protein and urine enzymes determination. |

Programme Outcomes (Biochemistry (Veterinary Medicine) Master)

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| 1 | To be able to tell and describe the interdisciplinary interaction with the associated fields. |
| 2 | To be able to express original ideas using his/her higher education knowledge theoretically and practically information and to be able to creat original definations,products,methods improving and questioning these ideas. |
| 3 | To be able to manage a free research according to scientific and metodological methods and be able to hypothetically and practically about his/her own field. |
| 4 | To be able to compose and interpret the information from different disciplines, and create solution suggestions and scientific information which can contribute to the solution process. |
| 5 | To be able to involves in professional organizations and institutions related with the educational background. |
| 6 | To be able to take responsibility for individual and group work, and do the assignments in line with the skills. |
| 7 | To be able to communicate with the professionals out of the field when it is necessary, and contribute to the solution as a team member. |
| 8 | To be able to tell about the production and publishing methods of scientific information. |
| 9 | To be able to design the source and the type of information that is needed related with the field and chooses the activities that s/he wants to participate, by using his/her critical thinking abilities that is developed in the education. |
| 10 | To be able to use technological devices both for professional and social purposes. |
| 11 | To be able to compose and interpret any kind of data related with the field (field observations, produced scientific information etc.) and analyzes and interprets the results according to the aims of the research. |
| 12 | To be able to define the environmental health rules and apply them for prevention. |
| 13 | To be able to apply the knowledge gained in professional level with the awareness of the needs of the region and the country, and develop a defense capability. |
| 14 | To be able to conceptualize the phenomena and the events related with the field; study scientific methods and techniques, interpret results; analyze and hypothesize methods in accordance with the results and design solution or treatment alternatives addressing the problems. |
| 15 | To be able to interpret the updates of information in the field by using all kinds of sources (scientific information, legislations etc.), and use when needed. |

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

| | L1 | L2 | L3 | L4 | L5 |
|-----|----|----|----|----|----|
| P2 | 5 | 5 | 5 | | |
| P3 | 5 | 5 | 5 | | |
| P4 | 5 | 5 | 5 | 5 | 5 |
| P7 | | | | 5 | 5 |
| P8 | 5 | 5 | 5 | | |
| P10 | | | | 4 | 4 |
| P11 | 5 | 5 | 5 | | |

