

| Dentistry (English) | | | |
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| Bachelor | TR-NQF-HE: Level 6 | QF-EHEA: First Cycle | EQF-LLL: Level 6 |

Course Introduction and Application Information

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| Course Code: | DENT212 | | |
| Course Name: | Physiology 2 | | |
| Semester: | Spring | | |
| Course Credits: | <div>ECTS</div> <div>3</div> | | |
| Language of instruction: | English | | |
| Course Condition: | | | |
| Does the Course Require Work Experience?: | No | | |
| Type of course: | Compulsory Courses | | |
| Course Level: | <div> <div>Bachelor</div> <div>TR-NQF-HE:6. Master`s Degree</div> <div>QF-EHEA:First Cycle</div> <div>EQF-LLL:6. Master`s Degree</div> </div> | | |
| Mode of Delivery: | Face to face | | |
| Course Coordinator: | Dr. Öğr. Üy. İLKNUR DURSUN | | |
| Course Lecturer(s): | Prof Rauf Onur Ek | | |
| Course Assistants: | | | |

Course Objective and Content

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| Course Objectives: | The primary objective of the DENT 212 Course is to ensure that students understand how the body works. After completing this course students should be able to: 1. Define homeostasis and explain how homeostatic mechanisms normally maintain a constant interior milieu. 2. State the functions of each renal, digestion nerve, endocrin and reproductive system 3. Understand and demonstrate the interrelations of the systems. |
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| Course Content: | Basic Principles of Renal Physiology, Overview of the Digestive System, How Are Gastrointestinal Processes Regulated? Neuronal Signaling and the Structure of the Nervous System, Consciousness, the Brain, and Behavior, Sensory Physiology The Endocrine System, Male and Female Reproductive Physiology |
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Learning Outcomes

The students who have succeeded in this course;

- 1) Defines homeostasis and explains how homeostatic mechanisms normally maintain a constant interior milieu.
- 2) States the functions of each urinary, digestion, endocrin and reproductive systems
- 3) Knows and demonstrates the interrelations of the systems.

Course Flow Plan

| Week | Subject | Related Preparation |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 1) | Basic Principles of Renal Physiology | - |
| 2) | Regulation of Ion and Water Balance | - |
| 3) | Hydrogen Ion Regulation | - |
| 4) | Overview of the Digestive System, Structure of the Gastrointestinal Tract Wall , How Are Gastrointestinal Processes Regulated? Mouth, Pharynx, and Esophagus | - |
| 5) | The Stomach, The Small Intestine, The Large Intestine | - |
| 6) | Neuronal Signaling and the Structure of the Nervous System | - |
| 7) | Control of Body Movement | - |
| 8) | MIDTERM EXAM | - |
| 9) | Consciousness, Brain, and Behavior | - |
| 10) | Sensory Physiology | - |
| 11) | The Endocrine System I | - |
| 12) | The Endocrine System II | - |
| 13) | Male Reproductive Physiology | - |
| 14) | Female Reproductive Physiology | - |

Sources

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| Course Notes / Textbooks: | VANDER'S Human Physiology The Mechanisms of Body Function 15th Edition |
| References: | Guyton and Hall Textbook of Medical Physiology, 12th Edition |

Course - Program Learning Outcome Relationship

| Course Learning Outcomes | 1 | 2 | 3 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|
| Program Outcomes | | | |
| 1) Has basic and up-to-date knowledge in the field of dentistry, follows scientific publications, and applies evidence-based data to his/her professional practice. | 2 | 2 | 2 |
| 2) Knows well and effectively uses devices, tools, and materials specific to diagnosis and treatment in the field of dentistry. | | | |
| 3) Evaluates the knowledge in the field of dentistry critically, integrates it with the knowledge of disciplines in the field of health, uses it by analyzing and synthesizing it. | 2 | 2 | 2 |
| 4) Produces projects related to the field of dentistry, can work with other health disciplines, takes part as a member of the research team and evaluates and reports the results obtained at a scientific level. | 2 | 2 | 2 |
| 5) Uses information that will contribute to the dentistry profession during practice, takes responsibility, and produces solutions in unforeseen situations. | 2 | 2 | 2 |
| 6) Shares, compares, and exchanges dental knowledge with professional colleagues in social and scientific environments in written, verbal, and visual forms. | | | |
| 7) Within the framework of social, scientific, and ethical values including patient privacy, communicates with patients and their relatives, knows all the characteristics of the patient, and recommends the most appropriate treatment with a patient-centered approach. | | | |
| 8) Follows technological developments, participates in national and international studies, and shares and presents own observations, experiences, and research to further advance dental practices. | | | |
| 9) By adopting the principle of lifelong learning throughout the dentistry profession, follows current evidence-based dental knowledge and uses it during his professional practice. | | | |
| 10) During dental practice, in cases such as abuse and addiction, performs the treatment by exhibiting the behaviors required by social ethics and legal rules, and collects and records the relevant data. | | | |
| 11) Uses basic and current knowledge in the field of dentistry during professional practice for the benefit of society within the framework of national values and country realities. | | | |

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| 12) In natural disasters and emergency cases, takes the protective measures required by the dentistry profession; performs professional practices that benefit patients and society | 1 | 2 | 3 |
| 13) Generates ideas regarding health policy in dentistry, prioritizes individual and public health, and carries out preventive and therapeutic medical practices within the framework of scientific, ethical, and quality processes. | | | |
| 14) Differentiates the signs and symptoms commonly encountered in the dentistry profession, makes a treatment plan and refers when necessary, and manages diseases and clinical situations regarding their urgency and patient priority. | | | |
| 15) Can assume the leadership responsibility of the team he/she works for, manage it following scientific criteria, and support the professional development of the team. | | | |

Course - Learning Outcome Relationship

| No Effect | 1 Lowest | 2 Average | 3 Highest |
|-----------|----------|-----------|-----------|
| | | | |

| | Program Outcomes | Level of Contribution |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1) | Has basic and up-to-date knowledge in the field of dentistry, follows scientific publications, and applies evidence-based data to his/her professional practice. | 2 |
| 2) | Knows well and effectively uses devices, tools, and materials specific to diagnosis and treatment in the field of dentistry. | |
| 3) | Evaluates the knowledge in the field of dentistry critically, integrates it with the knowledge of disciplines in the field of health, uses it by analyzing and synthesizing it. | 2 |
| 4) | Produces projects related to the field of dentistry, can work with other health disciplines, takes part as a member of the research team and evaluates and reports the results obtained at a scientific level. | 2 |
| 5) | Uses information that will contribute to the dentistry profession during practice, takes responsibility, and produces solutions in unforeseen situations. | 2 |
| 6) | Shares, compares, and exchanges dental knowledge with professional colleagues in social and scientific environments in written, verbal, and visual forms. | |
| 7) | Within the framework of social, scientific, and ethical values including patient privacy, communicates with patients and their relatives, knows all the characteristics of the patient, and recommends the most appropriate treatment with a patient-centered approach. | |
| 8) | Follows technological developments, participates in national and international studies, and | |

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| | shares and presents own observations, experiences, and research to further advance dental practices. | |
| 9) | By adopting the principle of lifelong learning throughout the dentistry profession, follows current evidence-based dental knowledge and uses it during his professional practice. | |
| 10) | During dental practice, in cases such as abuse and addiction, performs the treatment by exhibiting the behaviors required by social ethics and legal rules, and collects and records the relevant data. | |
| 11) | Uses basic and current knowledge in the field of dentistry during professional practice for the benefit of society within the framework of national values and country realities. | |
| 12) | In natural disasters and emergency cases, takes the protective measures required by the dentistry profession; performs professional practices that benefit patients and society | |
| 13) | Generates ideas regarding health policy in dentistry, prioritizes individual and public health, and carries out preventive and therapeutic medical practices within the framework of scientific, ethical, and quality processes. | |
| 14) | Differentiates the signs and symptoms commonly encountered in the dentistry profession, makes a treatment plan and refers when necessary, and manages diseases and clinical situations regarding their urgency and patient priority. | |
| 15) | Can assume the leadership responsibility of the team he/she works for, manage it following scientific criteria, and support the professional development of the team. | |

Assessment & Grading

| Semester Requirements | Number of Activities | Level of Contribution |
|-----------------------------|----------------------|-----------------------|
| Midterms | 1 | % 40 |
| Final | 1 | % 60 |
| total | | % 100 |
| PERCENTAGE OF SEMESTER WORK | | % 40 |
| PERCENTAGE OF FINAL WORK | | % 60 |
| total | | % 100 |

Workload and ECTS Credit Calculation

| Activities | Number of Activities | Preparation for the Activity | Spent for the Activity Itself | Completing the Activity Requirements | Workload |
|------------|----------------------|------------------------------|-------------------------------|--------------------------------------|----------|
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|----------------|----|---|---|--|----|
| Course Hours | 26 | 1 | 1 | | 52 |
| Midterms | 1 | 4 | 1 | | 5 |
| Final | 1 | 8 | 1 | | 9 |
| Total Workload | | | | | 66 |