



# UNICUSANO

Università degli Studi Niccolò Cusano - Telematica Roma

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| <b>Course</b>                                      | <b>ENDOCRINOLOGY</b>  |
| <b>Main language of instruction</b>                | Italian   |
| <b>Other language of instruction</b>               | English   |
| <b>Italian Code</b>                                | MEDS-08/A - ENDOCRINOLOGY   |
| <b>Academic Year</b>                               | 2024-2025   |
| <b>ECTS (Credits)</b>                              | 6   |
| <b>Propaedeuticity</b>                             | Anatomy (mandatory)<br>Physiology (mandatory)<br>Elements of human anatomy and physiology of the main systems and organs, concepts of biology, concepts of the functioning of signal transduction mechanisms.   |
| <b>Head Professor</b>                              | Professor Emanuela Greco<br>EMAIL: <a href="mailto:emanuela.greco@unicusano.it">emanuela.greco@unicusano.it</a>   |
| <b>Presentation</b>                                | The course of Endocrinology provides the basic concepts of hormone, hormone-receptor interaction, gland, organ with endocrine activity and cell-cell communication. The main hormones and their biological functions, the functioning of the main endocrine glands, their regulation mechanisms in basal conditions and in response to physical exercise are analyzed. The basic concepts of hormone doping are addressed. Basic knowledge of the main endocrine dysfunctions is provided.  |
| <b>Objectives</b>                                  | <ul style="list-style-type: none"> <li>• Knowledge of the main characteristics of cellular communication through hormones.</li> <li>• Knowledge of the endocrine glands treated, their functions and the hormones secreted.</li> <li>• Knowledge of the regulatory mechanisms of the treated endocrine glands both in basal conditions and in response to physical exercise.</li> <li>• Basic knowledge of hormone doping.</li> <li>• Basic knowledge of the main endocrine dysfunctions.</li> </ul>  |
| <b>Expected Learning Outcomes and Competencies</b> | <p><b>KNOWLEDGE AND UNDERSTANDING:</b> the student will have acquired the knowledge and ability to understand the basic principles relating to general endocrinology and endocrinology applied to physical exercise.</p> <p><b>APPLICATION OF KNOWLEDGE AND UNDERSTANDING:</b> the student will be able to apply the knowledge acquired in daily practice, within the limits of their responsibilities and skills.</p> <p><b>MAKING JUDGEMENTS:</b> the student will achieve his own autonomy of evaluation regarding the endocrine system and its implications in physical activity.</p> <p><b>COMMUNICATION SKILLS:</b> the student will have acquired a specific language with respect to the teaching area and the essential communication skills to interface with the target audience.</p> <p><b>LEARNING SKILLS:</b> the student will be able to use, in daily practice, the knowledge acquired to work adequately with the target audience, within the limits of their responsibilities and skills.</p> |
| <b>Organization</b>                                | The Endocrinology course includes 6 ECTS (credits) - which correspond to a study load of at least 150 hours by the student - and is developed through pre-recorded audio-video lessons, slides and handouts. The study materials, which are available on the platform, contain all the elements necessary to study the subject in view of the exam. Furthermore, for even more detailed preparation we recommend consulting the texts indicated below.  |

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|  | <p>The study load includes at least the following components:</p> <ul style="list-style-type: none"> <li>• 126 hours of course for viewing and studying the pre-recorded lessons (for a total of 18 hours of video-recorded lessons);</li> <li>• 24 hours of interactive teaching on the forum (virtual classroom) aimed at carrying out exercises and exercises proposed by the professors, called e-tivity (n.1).</li> </ul> <p>Finally, teaching makes use of synchronous tools such as web-conference reception and chats available on the platform in order to allow real-time interaction with enrolled students.</p> <p>The student is advised to distribute the study of the subject evenly over a 12-week period, dedicating at least 12 hours a week to studying.</p>  |
| <p><b>Course Contents</b></p>                | <p>Syllabus (Italian)</p> <ul style="list-style-type: none"> <li>• SUBJECT 1 – Principles of endocrinology.</li> <li>• SUBJECT 2 – Hypothalamic-pituitary system.</li> <li>• SUBJECT 3 – Thyroid, parathyroids and calcium-phosphorus metabolism.</li> <li>• SUBJECT 4 – Adrenal gland, endocrine pancreas and adipose tissue.</li> <li>• SUBJECT 5 – Reproductive system: the gonads.</li> <li>• SUBJECT 6 – Hormones and physical exercise.</li> </ul> <p>Pre-recorded video lessons by the instructor divided into 6 subjects (Italian)</p> <p>Teaching support materials by the professor (syllabus, slides, scientific papers) (Italian/English)</p> <p>Recommended Italian and English texts for further information:</p> <p><i>Endocrinologia e attività motorie - di Andrea Lenzi, Gaetano Lombardi, Enio Martino, Francesco Trimarchi. Elsevier 2008.</i></p> <p><i>Endocrinologia e Malattie del Metabolismo. IV edizione. Dario Giugliano. Idelson-Gnocchi 2020.</i></p> <p><i>Handbook of Endocrinology and Metabolism - Luca Persani, Olaf Hiort, Mario Maggi, Alberto M. Pereira. Minerva Medica 2023. ISBN: 9788855321976.</i></p>  |
| <p><b>Evaluation System and Criteria</b></p> | <p>The examination consists of:</p> <ul style="list-style-type: none"> <li>- A written test. It includes 30 multiple choice questions which concern the entire course program. Each of the 30 multiple choice questions relating to the contents of the exam program is assigned a value of 1 point. <b>The written test will be <u>ONLY</u> in ITALIAN LANGUAGE.</b></li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>- An oral test. It consists of an interview aimed at ascertaining the student's level of preparation. The latter normally consists of 3 questions which concern the entire course program, each question has equal dignity and therefore a maximum mark of 10+. <b>The oral test will be in ITALIAN <u>OR</u> in ENGLISH for students who <u>request it</u>.</b></li> </ul> <p>In both exam methods, particular attention in evaluating the answers is given to the student's ability to rework, apply and present the material present on the platform with correct language.</p> <p>During the final evaluation, the <b>fruitful participation in the forums</b> (virtual classrooms) and <b>the correct carrying out of the proposed e-tivity</b> will also be taken into account.</p> |