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| BACHELOR DEGREE**PHYSICAL THERAPY**2nd YEAR OF STUDY, 1ST SEMESTER |

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| **Course title** | | **KINESIOLOGY** |
| Course code | | SL1112118 |
| Course type | | tutorial |
| Course level | | 1st cycle (bachelor’s degree) |
| Year of study, semester | | 2nd year of study, 1st semester |
| Number of ECTS credits | | 6 |
| Number of hours per week | | 4 (2 lecture hours + 2 seminar hours) |
| Name of lecture holder | | OPREAN ALEXANDRU |
| Name of seminar holder | | OPREAN ALEXANDRU |
| Prerequisites | | Advanced level of English |
| A | **General and course-specific competences** | |
|  | **General competences**:   * Modular design (Physical and sports education, Sport and motor performance, Kinetotherapy and special motor skills) and planning the basic contents of the field with interdisciplinary orientation * The assessment of physical growth and development and the quality of the motor according to the specific requirements / objectives of the physical and sports education, the attitude towards the independent practice of the physical exercise   **Course-specific competences**:   * Organization of physical therapy activities for people of different ages and levels of training under qualified assistance conditions, respecting the rules of professional ethics and deontology * Fulfillment of efficient and effective work tasks for organizing and conducting sports activities | |
| B | **Learning outcomes** | |
|  | * Implementation of a system of theoretical and applied knowledge in the field of kinesiology in order to be used later in the professional activity of students. * Acquiring the scientific knowledge specific to the discipline; * The possibility of analyzing and synthesizing some cases given by kinesiology problems; * Formation of a correct thinking in the field for solving the problem of motility; * Integration of the related disciplines studied. | |
| C | **Lecture content** | |
|  | * The movement of man as a field of research. * Kinesiology, interdisciplinary science. Conceptual delimitations * The evolution of human motility. The levers of the body * Internal and external forces involved in the movement * Morphological and functional support of motility. Bones and joints. Bone architecture laws * Morphological and functional support of motility. Muscle fiber. Mechanical properties of skeletal muscle * Morphological and functional support of motility. Neuromuscular activity * Methodology for evaluating motor activity * Structural analysis of an osteo-muscular kinematic chain * Upper limb biomechanics: the acromioclavicular musculoskeletal complex * Segmental movements of the upper limb; joint movements of the humerus-cubito-radial joints and of the hand * Lower limb biomechanics: joint and segmental movements of the lower limb * Kinesiology of human walking * Kinesiology of particular movements: running, special walking, etc. | |
| D | **Recommended reading for lectures** | |
|  | * Hamilton, N., Luttgens, K., Kinesiology: scientific basis of human motion, McGraw-Hill, Canada, 2002. * Hoffman S., şi col. Introduction to Kinesiology. USA. Human Kinetics, 2005. * Neumann, D., Kinesiology of the musculoskeletal system, Mosby Published, 2002Jivan, I., Îndrumar metodic de înot, Editura IEFS, Bucureşti, 1990. | |
| E | **Seminar content** | |
|  | * Structural analysis of an osteo-muscular kinematic chain * Anthropometric segmental sizes * Determination of segmental mass centers of the musculoskeletal system * Inertial sizes of the human body * Analysis of human walking * Analysis of the running step | |
| F | **Recommended reading for seminars** | |
|  | * Hamilton, N., Luttgens, K., Kinesiology: scientific basis of human motion, McGraw-Hill, Canada, 2002. * Hoffman S., şi col. Introduction to Kinesiology. USA. Human Kinetics, 2005. * Neumann, D., Kinesiology of the musculoskeletal system, Mosby Published, 2002Jivan, I., Îndrumar metodic de înot, Editura IEFS, Bucureşti, 1990. | |
| G | **Education style** | |
| learning and teaching methods | | Interactive lectures, explanation, demonstrations, viewing material and so on |
| assessment methods | | Teoretical evaluation |
| Language of instruction | | English |