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

|  |  |
| --- | --- |
| **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 |