# Course descriptions Kinetotherapy and Special Motor Skills - KTC

# Year III

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINETOTHERAPY AND SPORTS MEDICINE (D06)**

**COURSE SYLLABUS**
**2027-2028**

**1. Programme details**

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor skills/*Physiokinetotherapist - COR code 226401; Kinesitherapist - COR code 226405;* |

**2. Information about the discipline**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **Physiotherapy in orthopaedic and traumatic conditions** | | | | | | |
| 2.2 Course coordinator | Prof. Ligia Rusu | | | | | | |
| 2.3 Seminar coordinator(s) | Assistant Professor Horia Alin Burileanu<br>Assistant Professor Geambesa Michi Mihail | | | | | | |
| 2.4 Year of study | 3 | 2.5 Semester | V | 2.6 Type of assessment | E | 2.7 Course requirements | DOB |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 4 | of which: 3.2 lectures | 2 | 3.3 seminar/laboratory | 2 |
| 3.4 Total hours in the curriculum | 56 | of which: 3.5 course | 28 | 3.6 seminar/laboratory | 28 |
| Time allocation | | | | | |
| Study using textbooks, course materials, bibliography and notes | | | | | 16 |
| Additional documentation in the library, on specialised electronic platforms and in the field | | | | | 14 |
| Preparation of seminars/laboratories, assignments, reports, portfolios and essays | | | | | 8 |
| Tutoring | | | | | - |
| Examinations | | | | | 4 |
| Other activities consultations, student circles | | | | | 2 |
| 3.7 Total hours of | 44 | | | | |

| | |
|---|---|
| individual study | |
| 3.8 Total hours per semes | 10 |
| 3.9. Number of credits | 4 |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Anatomy, Semiology, Assessment, Biomechanics, Recovery Methods |
| 4.2 Skills | - |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Room with technical equipment - PC, video projector, screen |
| 5.2 for conducting the seminar/laboratory | Physiotherapy room |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC3. CC4. CC6. |
| 6.2. Professional skills | CP2.,CP3.,CP9. |
| 6.3. Transversal competences | CT2. CT3. CT4. CT5. CT6. CT7. |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | 1. The student/graduate explains the general notions of the field, referring to the concepts of motor skills and motor activity, the structure and functions of human motor activities, their effects on development and education, so that they can be used in the rehabilitation process.<br>2. The student/graduate defines the general, structural (anatomical) and functional concepts of the human body, with a view to developing rehabilitation programmes.<br>3. The student/graduate identifies general and age-specific behavioural aspects, pathology and population categories before, during and after intervention, in order to maximise the effects of the rehabilitation process. |
| 7.2. Skills/abilities | The student/graduate:<br>1.1. Uses fundamental concepts of human motor skills in various contexts.<br>1.2. Uses terminology according to motor activities.<br>1.3. Distinguishes the role and place of the physiotherapist in different professional contexts.<br>The student/graduate:<br>2.1. Identifies the structures and functions of the human body and methods for assessing biological functions.<br>2.2. Presents the actions of different muscle groups and movement parameters.<br>The student/graduate: |

| | |
|---|---|
| | 4.1. Explains the role of the human psyche in the rehabilitation process .<br>4.2. Demonstrate methods and techniques for influencing the subject's behaviour |
| 7.3. Responsibility and autonomy | The student/graduate:<br>1.1.1. Give examples of acts, actions and motor activities.<br>1.2.1. Argues for the use of specialised terminology in debates within the field.<br>1.3.1. Identifies the duties of the physiotherapist within interdisciplinary teams Provides quality functional rehabilitation services in accordance with professional standards.<br>The student/graduate:<br>2.1.1. Integrates fundamental concepts regarding the structures and functions of the human body into the rehabilitation process.<br>2.2.1. Recognises the characteristics of movement and their parameters<br>The student/graduate:<br>4.1.1. Identifies the relationship between the functioning of the mental system and the presence of pathologies.<br>4.2.1. Uses professional communication techniques before, during and after the intervention. |

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**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | To learn about kinesitherapy as a method of treatment for orthopaedic and traumatic conditions, with the aim of functional rehabilitation. |
| 8.2. Specific objectives | -Knowledge of the clinical and functional aspects of orthopaedic and traumatic conditions<br>-Indications and contraindications for the application of kinesitherapy in orthopaedic and traumatic conditions<br>-Understanding post-traumatic sequelae, functional assessment, setting short-term and long-term recovery goals |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| 1. Introductory notions on post-traumatic recovery | Oral presentations, presentations PowerPoint presentations, films | 2 |
| 2. Assessment of post-traumatic sequelae, methods and kinetic means applied in post-traumatic recovery | | 2 |
| 3. Kinetics intervention in post-traumatic skin, joint, muscle and general sequelae | | 6 |
| 4. Post-traumatic shoulder – assessment, | | 4 |

| | | |
|---|---|---|
| sequelae, kinetic therapy | | |
| 5. Elbow – assessment, sequelae, physical therapy | | 2 |
| 6. Hand – assessment, sequelae, physiotherapy | | 2 |
| 7. Hip – assessment, sequelae, physiotherapy | | 4 |
| 8. Knee – assessment, sequelae, physiotherapy | | 4 |
| 9. Foot – assessment, sequelae, physiotherapy | | 2 |


Bibliography
1. Gonzalez E, Myers S, etc. (2001) Physiological Basis of Rehabilitation Medicine Ed. Butterworth-Heinemann – Boston
2. Hall C, Brody L (1999 Therapeutic Exercise. (Moving toward function) Ed. Lippincot Williams and Wilkins, Philadelphia
3. Ligia Rusu. Kinetics intervention in neuromyartrokinetic system disorders, Editura Universitaria Craiova, 2007, ISBN 978-973-742-609-3
4. Ligia Rusu - Orthotics and Prosthetics in Kinetotherapy, Universitaria Craiova Publishing House, 2007, ISBN 978-973-742-617-8
5. Ligia Rusu, Eugenia Roşulescu Kinetotherapy in the recovery of orthopaedic and traumatic conditions, Universitaria Publishing House, 2007, ISBN 978-973-742-731-1


| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
|---|---|---|
| 1. Objectives and methods of recovery in post-traumatic sequelae | Presentation of recovery programmes, adaptation to specific clinical cases. | 4 |
| 2. Principles of recovery in post-traumatic shoulder injuries | | 4 |
| 3. Principles of recovery in post-traumatic elbow and hand injuries | | 4 |
| 4. Principles of recovery in post-traumatic hip injuries | | 4 |
| 5. Principles of recovery in sports injuries of the hip | | 4 |
| 6. Principles of recovery in post-traumatic knee injuries | | 4 |
| 7. Principles of recovery in post-traumatic injuries of the foot and ankle | | 4 |


Bibliography
1. Gonzalez E, Myers S, etc. (2001) Physiological Basis of Rehabilitation Medicine Ed. Butterworth-Heinemann – Boston
2. Hall C, Brody L (1999 Therapeutic Exercise. (Moving toward function) Ed. Lippincot Williams and Wilkins, Philadelphia
3. Ligia Rusu. Kinetic Intervention in Disorders of the Neuromyartrokinetic System, Universitaria Craiova Publishing House, 2007, ISBN 978-973-742-609-3
4. Ligia Rusu - Orthotics and Prosthetics in Kinetotherapy, Universitaria Publishing House, Craiova, 2007, ISBN 978-973-742-617-8
5. Ligia Rusu, Eugenia Roşulescu Kinetotherapy in the recovery of orthopaedic and traumatic conditions, Universitaria Publishing House, 2007, ISBN 978-973-742-731-1

**10. Corroboration of the discipline's content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

| |
|---|
| Cooperation with neuromotor recovery services in hospitals and recovery centres, with the aim of improving the clinical and functional assessment of patients with neuromotor disorders, as well as monitoring recovery programmes. |

**11. Assessment**

| Type of activity | 11.1 Evaluation criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | in line with educational objectives | Written exam | 70 |
| 11.2. Seminar/laboratory | - in line with the educational objectives of practical work | 5 tractical exam – clinical case/presentation | 30% |
| 11.3. Minimum performance standard grade 5 | | | |

Date of completion

1.09.2025 Signature of course coordinator Signature of the laboratory coordinator

Prof. Ligia Rusu, PhD Assistant Professor Horia Alin Burileanu, PhD

Assistant Professor Geambesa Michi Mihail

Date of approval by the department Signature of the head of department

15.09.2025 Prof. Ligia Rusu

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

# SUBJECT DESCRIPTION
# 2027

## 1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor *skills/Physiokinetotherapist - COR code 226401; Kinesitherapist - COR code 226405;* |

## 2. Information about the discipline

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **Physiotherapy in geriatrics - gerontology** | | | | | | |
| 2.2 Course coordinator | Associate Professor Dr. Gusti Alice | | | | | | |
| 2.3 Seminar lecturer(s) | Associate Professor Dr. Gusti Alice<br>Lecturer Dr. Gorgan Anamaria | | | | | | |
| 2.4 Year of study | III | 2.5 Semester | V | 2.6 Type of assessment | E | 2.7 Course requirements | DOB |

## 3. Total estimated time (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 4 | of which: 3.2 lectures | 2 | 3.3 seminar/laboratory | 2 |
| 3.4 Total hours in the curriculum | 56 | of which: 3.5 course | 28 | 3.6 seminar/laboratory | 28 |

| Distribution of time | hours |
|---|---|
| Study using textbooks, course materials, bibliography and notes | 5 |
| Additional documentation in the library, on specialised electronic platforms and in the field | 3 |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | 7 |
| Tutoring | - |
| Examinations | 2 |
| Other activities | 2 |

| | |
|---|---|
| 3.7 Total hours of individual study | 19 |
| 3.8 Total hours per semester | 75 |
| 3.9. Number of credits | 3 |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Anatomy, Physiology, General Principles of Kinetotherapy, Semiology, Methods and Techniques of Neuromotor Re-education |
| 4.2 Skills | Ability to apply methods, procedures, techniques and means specific to physiotherapy in geriatrics and gerontology. |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Technical equipment room - PC, video projector, screen |
| 5.2 for conducting the seminar/laboratory | Based on the teacher's demonstration and explanation, students practise applying rehabilitation programmes for elderly people. |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC3, CC4 |
| 6.2. Professional skills | CP3, CP6, CP7, CP9, CP12, CP18, CP26, CP33, CP39 |
| 6.3. Transversal competences | CT2, CT4, CT5, CT9, CT12, CT16. |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | 1. The student/graduate explains the general notions of the field, referring to the concepts of motor skills and motor activity, the structure and functions of human motor activities, their effects on development and education, so<br>that they can be used in the rehabilitation process.<br>2. The student/graduate defines the general, structural (anatomical) and functional concepts of the human body, with a view to developing rehabilitation programmes.<br>the effects of the rehabilitation process. |
| 7.2. Skills/abilities | The student/graduate:<br>1.1. Uses the fundamental concepts of human motor skills in various contexts.<br>1.2. Uses terminology according to motor activities.<br>1.3. Distinguishes between the roles of the physiotherapist ( ) and the physiotherapist ( ) in different professional contexts.<br>of the physiotherapist in different professional |

| | |
|---|---|
| | contexts.<br>The student/graduate:<br>2.1. Identifies the structures and functions of the human body and methods for assessing biological functions.<br>Presents the actions of different muscle groups and movement parameters. |
| 7.3. Responsibility and autonomy | The student/graduate:<br>1.1.1. Gives examples of motor acts, actions and activities.<br>1.2.1. Justifies the use of specialised terminology in debates in the field .<br>Identifies the duties of the physiotherapist within interdisciplinary teams.<br>The student/graduate:<br>2.1.1. Integrates fundamental concepts regarding the structures and functions of the human body into the rehabilitation process.<br>Recognises the characteristics of movement and their parameters. |

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**8. Course objectives** (based on the competency grid)

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|---|---|
| 8.1. General objective of the discipline | Primary clinical (functional) assessment, diagnosis of physiotherapy intervention and implementation of physiotherapy intervention programmes for recovery purposes. |
| 8.2. Specific objectives | Acquisition of the theoretical knowledge necessary for understanding neurophysiological mechanisms and developing the ability to justify therapeutic conduct.<br><br>Knowledge and application of specific assessment of elderly patients.<br><br>Developing the practical skills necessary for selecting and applying specific means, techniques, procedures and methods for the recovery of elderly patients. |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| Stages of the ageing process. Types of ageing | Interactive course | 2 |
| Mechanisms of the ageing process | Interactive course | 4 |
| Geriatric strategies for slowing down the ageing process | Interactive course | 2 |
| Concepts of psychological ageing | Interactive course | 2 |
| Criteria (markers) of ageing | Interactive course | 4 |
| Geriatric rehabilitation – general principles, indications, contraindications | Interactive course | 2 |
| Immobilisation syndrome – determining factors, contributing factors, | Interactive course | 2 |

| | | |
|---|---|---|
| Concepts of psychological ageing | Interactive course | 2 |
| Recovery of elderly people with locomotor disabilities<br>Rehabilitation of elderly people with neurological disabilities<br><br>Diffuse cerebral arteriosclerosis – a common diagnosis in geriatric practice<br><br>: symptoms, prognosis and progression. | Interactive course | 8 |
| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
| Kinetotherapy in geriatrics – basic rules and principles; kinetoprophylaxis | Implementation of recovery programmes for elderly people with specific pathological profiles | 2 |
| Kinetotherapy in respiratory diseases: respiratory gymnastics, drainage postures | Implementation of recovery programmes for elderly people with specific pathological profiles | 2 |
| Kinetics treatment of physical impairments in elderly people: kyphosis, lordosis, scoliosis, weak abdomen, flat feet | Implementation of recovery programmes for elderly people with specific pathological profiles | 4 |
| Kinetics treatment for inflammatory rheumatic conditions: scapulohumeral periarthritis, coxarthrosis, gonarthrosis; rheumatoid arthritis, ankylosing spondylitis | Implementation of recovery programmes for elderly people with specific pathological profiles | 4 |
| Kinetics treatment in degenerative rheumatism: spinal arthrosis (cervical, dorsal, lumbar spondylosis) – medical gymnastics exercises<br>Kinetics treatment in neurological disorders: amyotrophic lateral sclerosis, Parkinson's syndromes, hemiplegia secondary to cerebrovascular accidents<br>Kinetics treatment in cardiovascular disorders: myocardial infarction, obliterating atherosclerosis, thrombophlebitis, varicose veins of the lower limbs<br>Kinetics treatment for nutritional disorders (obesity, diabetes mellitus) | Implementation of recovery programmes for elderly people with specific pathological profiles | 16 |

Bibliography:


1. Ghidrai, O – Geriatrics and Gerontology, 2nd edition, Casa Cărții de Știință, Cluj-Napoca, 2002
2. Popescu, N., Stănescu, I., Vițian, V. – Old age and physical kinetic recovery, Ed. Universitaria

Craiova, 2005
3. Rabolu, E. – Management of physical activities in the elderly, Ed Universitaria, Craiova, 2009
4. Bălăceanu-Stolnici, C. – Practical Geriatrics, Ed. Medicală Almatea, Bucharest, 1998
5. Applied activities in electronic format

**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

The content of the discipline responds to the need to know the scientific foundations of the recovery of an elderly patient. The content of the discipline is in line with the requirement to develop the skills necessary to apply the means, techniques, procedures and methods of learning correctly and effectively within the framework of kinesitherapy intervention programmes.

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | Level of mastery of course content. | Written exam (multiple choice) | 66 |
| | | | |
| 11.2. Seminar/laboratory | Level of participation in practical work. | Assessment of how to structure a recovery programme for a rheumatology patient with a pre-established theme | 17 |
| | Degree of mastery of the application of means, techniques, procedures and methods in the recovery of a condition in old age. | Assessment of the correctness, progressiveness and complexity of the application of a recovery programme for an elderly patient | 17 |
| | | | |
| 11.3. Minimum performance standard | | | |
| | | | |

Date of completion coordinator: 01.09.2025

Signature of course coordinator: Associate Professor Dr. Gusti Alice

Signature of the seminar: Associate Professor Dr. Gusti Alice

Lecturer Dr. Gorgan Anamaria

Date of approval in the department
15.09.2025

Signature of the head of department
Prof. Ligia Rusu, PhD

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

# SUBJECT DESCRIPTION
# 2027

## 1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor *skills/Physiokinetotherapist - COR code 226401; Kinetotherapist - COR code 226405;* |

## 2. Information about the discipline

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **Physiotherapy in respiratory disorders** | | | | | | |
| 2.2 Course coordinator | **Assoc. Prof. Mihaela ZĂVĂLEANU** | | | | | | |
| 2.3 Seminar lecturer(s) | **Associate Professor Mihaela ZĂVĂLEANU**<br>**Assoc. Prof. NEAMȚU Oana Maria** | | | | | | |
| 2.4 Year of study | III | 2.5 Semester | V | 2.6 Type of assessment | E | 2.7 Course requirements | DOB |

## 3. Total estimated time (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 4 | of which: 3.2 lectures | 2 | 3.3 seminar/laboratory | 2 |
| 3.4 Total hours in the curriculum | 56 | of which: 3.5 course | 28 | 3.6 seminar/laboratory | 28 |
| Distribution of time | | | | | hours |
| Study using textbooks, course materials, bibliography and notes | | | | | 15 |
| Additional documentation in the library, on specialised electronic platforms and in the field | | | | | 12 |

| | |
|---|---|
| Preparation of seminars/laboratories, assignments, reports, portfolios and essays | 14 |
| Tutoring | 0 |
| Examinations | 3 |
| Other activities | - |

| | |
|---|---|
| 3.7 Total hours of individual study | 44 |
| 3.8 Total hours per semester | 10 |
| 3.9. Number of credits | 4 |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Anatomy, Semiology, Physiology, Physiopathology, Exercise Physiology, Radiology and Medical Imaging |
| 4.2 Skills | Not applicable |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Room equipped with specific equipment and instruments, computer, video projection equipment |
| 5.2 for conducting the the seminar/laboratory | Room/cabinet equipped with specific equipment and instruments, computer, video projection device |

**6. Skills**

| | |
|---|---|
| 6.1. Key competences | CC4, CC5, CC7 |
| 6.2. Professional skills | CP1, CP2, CP3, CP4, CP9, CP12, CP19, CP22, CP24, CP26, CP30, CP33, CP34, C43 |
| 6.3. Transversal competences | CT5, CT6, CT7, CT8, CT9, CT10, CT11, CT13 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | - The student/graduate identifies general and age-specific behavioural aspects, pathology and population categories before, during and after intervention, in order to maximise the effects of the respiratory rehabilitation process |
| 7.2. Skills/ Skills | - The student/graduate:<br>4.1.Explains the role of the human psychic system in the rehabilitation process for respiratory conditions<br>4.2.Demonstrates methods and techniques for influencing the behaviour of subjects with respiratory disorders |
| 7.3.Responsibility and autonomy | -Student/graduate<br>4.1.1. Identifies the relationship between the functioning of the psychic system and the presence of respiratory pathologies<br>4.2.1. Uses professional communication techniques before, during and after intervention |

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | - Acquiring the theoretical and practical specialist knowledge necessary to perform effective kinetic interventions in the treatment of respiratory disorders.<br>- Developing the ability to perform an accurate clinical and functional assessment of patients with respiratory pathology, which is essential for |

| | |
|---|---|
| | establishing an appropriate treatment plan.<br>- Application of physiokinesitherapy management, with an emphasis on the use of specific treatment methods and means, adapted to the stage of development of the pathology, with the aim of prevention, therapy and recovery. |
| 8.2. Specific objectives | - Acquisition of the specialist terminology necessary to study relevant materials and practise in the field of respiratory disorders.<br>- In-depth understanding of the etiopathogenic mechanisms underlying respiratory dysfunctions.<br>- Knowledge and application of basic physiotherapy and kinesitherapy methods in the recovery of respiratory functions.<br>- Develop and manage physiotherapy programmes in a professional context, in accordance with ethical and deontological standards.<br>- Development of the practical skills necessary to select and apply specific techniques, means and methods for the management of patients with respiratory disorders. |

**9. Content**

| **9.1. Course** | **Teaching methods** | **No. of hours** |
|---|---|---|
| Notions of respiratory anatomy and physiology. Introductory notions in respiratory kinesitherapy. Methods used in kinetic respiratory recovery, particularities of medical recovery in respiratory patients. | Course<br>Interactive | 4 |
| Relaxation and posture techniques - definition, mechanisms of production, properties, indications, contraindications | Interactive<br>Interactive | 2 |
| Aerosol therapy - definition, mechanisms of production, properties, indications, contraindications | Interactive<br>interactive | 2 |
| Mechanical ventilation and oxygen therapy - definition, production mechanisms, properties, indications, contraindications | Course<br>interactive | 2 |
| Bronchial drainage techniques in the recovery of respiratory dysfunctions. | Interactive<br>interactive | 2 |
| Gymnastics for correcting musculoskeletal deficiencies in respiratory patients. | Interactive<br>interactive | 2 |
| Cough and speech training. Moderate exercise training. Indications, contraindications. | Interactive<br>interactive | 2 |
| Respiratory dysfunctions. Definitions, aetiopathogenesis, classification, diagnosis: obstructive dysfunction, restrictive dysfunction, mixed dysfunction | Interactive<br>interactive | 6 |
| Covid 19 - Planning recovery and social integration. | Interactive<br>interactive | 2 |
| General principles for developing physiotherapy programmes for respiratory disorders. | Interactive<br>interactive | 4 |

Bibliography
1. Antonello M, Delplanque D. (2004), Understanding respiratory physiotherapy, Ed Elsevier Masson.
2. Vasilescu M,. Zavaleanu M. (2007) Physiotherapy methods used in the rehabilitation of patients with respiratory diseases, Universitaria Craiova Publishing House
3. Sbenghe, T. (1999). Theoretical and practical foundations of kinesitherapy. Medical Publishing House, Bucharest
4. Mihaela Zăvăleanu, (2004) Practical work in the medical recovery of patients with respiratory diseases, University of Craiova Printing House

| **9.2.Seminar/laboratory** | **Teaching** | **No. of hours** |
|---|---|---|

| | | |
|---|---|---|
| | **methods** | |
| Complete clinical and functional assessment of patients with respiratory disorders. Functional assessment elements of respiratory disorders | Explanation, demonstration | 4 |
| Posture, corrective exercises for respiratory patients – application methods, particularities | Explanation, demonstration | 2 |
| Methods of applying aerosol therapy and oxygen therapy procedures | Explanation, demonstration | 2 |
| Bronchial drainage techniques – application methods, practical details | Explanation, demonstration | 2 |
| Respiratory rehabilitation exercises – airflow control techniques, rib cage breathing rehabilitation, abdominal breathing rehabilitation, breath control and coordination | Explanation, demonstration | 2 |
| Cough and speech training - application methods, practical details | Explanation, demonstration | 2 |
| Exercise training – application method, practical details | Explanation, demonstration | 2 |
| Developing a respiratory recovery programme for patients with obstructive ventilatory dysfunction | Explanation, demonstration | 2 |
| Developing a respiratory recovery programme for patients with restrictive ventilatory dysfunction | Explanation, demonstration | 2 |
| Developing a respiratory recovery programme for patients with respiratory failure | Explanation, demonstration | 2 |
| Developing a respiratory recovery programme for patients with COVID-19 | Explanation, demonstration | 2 |
| Case studies - practical methods for developing a kinetic programme for patients with respiratory pathology | Individual and/or small group work | 4 |

Bibliography

1. Antonello M, Delplanque D (2004), Comprendre la kinesitherapie respiratoire, Ed Elsevier Masson.
2. Sbenghe, T. (1999). Theoretical and practical foundations of kinesitherapy. Medical Publishing House, Bucharest
3. Vasilescu M,. Zavaleanu M., 2007, Physiotherapy methods used in the rehabilitation of patients with respiratory diseases, Universitaria Publishing House, Craiova
4. Mihaela Zăvăleanu, *(2004) Practical work in the medical recovery of patients with respiratory diseases*, University of Craiova Printing House,
5. Covid 19 - https://colegiulfizioterapeutilor.ro/wp-content/uploads/2020/03/China-Terapia-de-reabilitare-pentru-pacien%C8%9Bii-cu-COVID-19.pdf
6. Long COVID - Scottish Intercollegiate Guidelines Network - https://www.sign.ac.uk/media/1876/sign-long-covid-patient-booklet-v2-0-0-2-romanian.pdf
7. Thomas P, Baldwin C, Bissett B, Boden I, Gosselink R, Granger CL, Hodgson CL, Jones AYM, Kho ME,

Moses R, Ntoumenopoulos G, Parry SM, Patman S, van der Lee L (2020): Physiotherapy management of COVID-19 in acute hospital settings: Recommendations – Clinical practice guideline. Version 1.0, published on 23 March 2020. Journal of Physiotherapy. - https://world.physio/sites/default/files/2020-06/Physiotherapy-Guideline-COVID-19-Romanian.pdf

**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

The course content aims to provide the theoretical and practical support necessary for effective cooperation with rehabilitation services in hospitals and specialist outpatient clinics, with a view to improving the treatment and prevention of respiratory disorders.

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | Assimilation of subject-specific knowledge demonstrated through correct explanation of specific concepts and notions | Written assessment | 70 |
| | In order to pass the discipline, the grade obtained in the written exam must be at least 5. | | |
| 11.2. Seminar/laboratory | 1 examination during the semester with topics from the topics presented in the course/laboratory | Practical/oral assessment | 30 |
| | Knowledge and application of the main physiotherapy methods used in respiratory pathology | | |
| 11.3. Minimum performance standard | | | |
| Knowledge of bronchial drainage and respiratory rehabilitation techniques.<br>The score from the written assessment must represent the pass mark (minimum 5) regardless of the other marks obtained | | | |

Date of completion lecturer: 01.09.2025

Signature of the course lecturer: Associate Professor Mihaela ZĂVĂLEANU, PhD

Signature of the seminar lecturer: Associate Professor Mihaela ZĂVĂLEANU, PhD

Assoc. Prof. NEAMȚU Oana Maria

Date of approval by the department: 15.09.2025

Signature of the head of department: Prof. Rusu Ligia

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

**SUBJECT DESCRIPTION**
**2027**

**1. Programme details**

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor skills / *Physiokinetotherapist - COR code 226401; Kinetotherapist - COR code 226405;* |

**2. Information about the discipline**

| | |
|---|---|
| 2.1 Name of the discipline | **PHYSIOTHERAPY IN PAEDIATRICS** |
| 2.2 Course coordinator | Associate Professor Dr. Roșulescu Eugenia |
| 2.3 Seminar coordinator(s) | Associate Professor Eugenia Roșulescu, Associate Professor Mihaela |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Zăvăleanu, Assistant Professor Radu Roșulescu | | | | | |
| 2.4 Year of study | **III** | 2.5 Semester | **V** | 2.6 Type of assessment | **E** | 2.7 Course requirements | **DOB** |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | **4** | of which: 3.2 lectures | **2** | 3.3 seminar/laboratory | **2** |
| 3.4 Total hours in the curriculum | **56** | of which: 3.5 course | **28** | 3.6 seminar/laboratory | **28** |
| Time allocation | | | | | |
| Study using textbooks, course materials, bibliography and notes | | | | | **22** |
| Additional research in the library, on specialised electronic platforms and in the field | | | | | **11** |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | | | | | **8** |
| Tutoring | | | | | **-** |
| Examinations | | | | | **1** |
| Other activities: consultations, student clubs | | | | | **2** |

| | |
|---|---|
| 3.7 Total hours of individual study | **44** |
| 3.8 Total hours per semester | **10** |
| 3.9. Number of credits | **4** |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Anatomy and Biomechanics, Kinesiology, Assessment Methods in Physiotherapy, Physiotherapy in Postural Disorders |
| 4.2 Skills | CP5, CP6, CP14, CT2, CT6. |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Room equipped with projector, laptop/computer, internet access and online platforms, course materials in electronic format (.ppt, .doc, .pdf), individual study of the course in advance, interactive student participation in the course. |
| 5.2 Seminar/laboratory delivery seminar/laboratory | Physiotherapy room, practical demonstrations, application by students of the explained physiotherapy programmes. |

**6. Key**

| | |
|---|---|
| 6.1. Key competences | CC4., CC5. |
| 6.2. Professional competences | PC5, PC6, PC7, PC14, PC15, PC24, PC28, PC39. |
| 6.3. Transversal competences | CT2., CT4., CT6., CT16. |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | The student explains the general notions of the field, referring to the concepts of motor skills and motor activity, the structure and functions of human motor activities, their effects on development and education, so that they can be used in the rehabilitation process. |
| 7.2. Skills | 1.1. Uses the fundamental notions of human motor skills |

| | |
|---|---|
| | in various contexts.<br>1.2. Uses terminology according to motor activities.<br>1.3. Distinguish the role and place of the physiotherapist in different professional contexts. |
| 7.3. Responsibility and autonomy | 1.1.1. Give examples of motor acts, actions and activities.<br>1.3.1. Identify the duties of the physiotherapist within interdisciplinary teams.<br>5.1.1.Comply with legal and professional standards in relations with beneficiaries.<br>5.2.1. Provide quality functional rehabilitation services in accordance with professional standards. |

.

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | Assessment, functional diagnosis and application of kinetic methods, knowledge of the fundamental aspects of the somatic and neuro-psycho-motor development of the child, the morphological and functional particularities of the child at each stage of development, as well as in-depth study of functional assessment methods. |
| 8.2. Specific objectives | Developing the ability to analyse, synthesise and interpret the concept of science in a modern way, perspectives on approaching it through theoretical subjects, deepening therapeutic principles, recovery goals and physical-kinetic means that can be applied in the complex treatment of paediatric conditions of congenital or acquired causes. |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| 1. Introductory notions in paediatrics: periods of childhood, growth and development, methods of assessing physical development, neuromotor development of the child, neuropsychic- e development, clinical and functional examination of infants, older children and adolescents. | Interactive lecture | **6** |
| 2. Therapeutic principles, methods and means of physical-kinetic and balneological treatment applied in the treatment of respiratory diseases in children (hygienic-dietetic treatment, electrotherapy, massage, kinesitherapy, occupational therapy, natural cure factors); indications, contraindications | interactive lecture | **4** |
| 3. Principles of recovery, objectives and means of physiotherapeutic and balneological treatment in the pathology of the locomotor system in children (congenital malformations, abnormalities of the spine, upper and lower limbs, inflammatory rheumatism in children, rickets) | interactive lecture | **6** |
| 4. Neurological and neuromuscular disorders in children (cerebral palsy, sequelae of poliomyelitis, muscular dystrophies, peripheral paralysis, post-traumatic neurological sequelae in children, spina bifida) - principles of recovery, objectives and means of physical- | interactive lecture | **6** |

| | | |
|---|---|---|
| kinetic and balneological treatment | | |
| 5. Neuropsychiatric disorders in children (affective disorders, reactive neuroses, autism, mental retardation) – the role of physiotherapy in the medical care of these children | interactive lecture | **4** |
| 6. Genetic syndromes and diseases, recovery of children with hearing, visual and/or verbal disabilities, the role of physiotherapy in the medical care of these children | interactive lecture | **2** |
| Bibliography<br>Roşulescu, E. *Basic concepts in the rehabilitation of paediatric conditions*. Universitaria Publishing House, Craiova, 2008.<br>Roşulescu, E., Zăvăleanu, M., Ilinca, I., Călina, M., Enescu, D., *Kinetotherapy in paediatric conditions*, Universitaria Publishing House, 2007.<br>E. Rosulescu, D. Bulucea, M. Zavaleanu, E. Buteica, Fl. Burada. Current trends in the assessment of children with cerebral palsy. Revista Medicina Modernă, 2009, vol XVI no. 2, pp. 90-95<br>L Rusu, E Rosulescu. Kinetotherapy in the recovery of orthopaedic and traumatic conditions. Universitaria Publishing House, 2007.<br>E Roşulescu et al. Pathological changes in two cases with hereditary spastic paraplegia. Romanian Journal of Morphology and Embryology, 2009, 50(2):299-303. | | |
| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
| 1. Methods of examination and evaluation of the child: growth rate of body segments in infants and young children, changes in the proportions between body segments; motor characteristics of the normal child | Explanations<br>Demonstrations<br>Practical exercises<br>Practical applications | **4** |
| 2. Recovery programmes to stimulate harmonious physical development in infants and older children | Explanations<br>Demonstrations<br>Practice<br>Practical applications | **2** |
| 3. Recovery programmes applicable to respiratory disorders (posture, bronchial drainage, respiratory gymnastics, phonetic and musical exercises) | Explanations<br>Demonstrations<br>Practice<br>Practical applications | **2** |
| 4. Recovery programmes applied to children with asthma, bronchial , bronchiolitis, bronchopneumopathy, respiratory failure | Explanations<br>Demonstrations<br>Practice<br>Practical applications | **2** |
| 5. Main physiotherapy methods used in the treatment of malformations, deviations and deformities of the musculoskeletal system (spine, shoulder girdle) in children | Explanations<br>Demonstrations<br>Practical exercises<br>Practical applications | **4** |
| 6. Main physical methods used in the treatment of malformations, deviations and deformities of the musculoskeletal system (lower limbs, pelvic girdle) in children | Explanations<br>Demonstrations<br>Practical exercises<br>Practical applications | **2** |
| 7. Recovery programmes recommended for children with rickets and inflammatory rheumatic conditions (juvenile chronic polyarthritis, ankylosing spondylitis) | Explanations<br>Demonstrations<br>Practice<br>Practical applications | **2** |
| 8. Recommended recovery programmes and their specific | Explanations | **4** |

| | | |
|---|---|---|
| application to children with neurological disorders (cerebral palsy, poliomyelitis sequelae, spina bifida, epilepsy, tic disorders) | Demonstrations<br>Practice<br>Practical applications | |
| 9. Recommended recovery programmes and their specific application to children with post-traumatic paraparesis/tetraparesis and obstetric paralysis | Explanations<br>Demonstrations<br>Practice<br>Practical applications | **4** |
| 10. Recovery programmes – characteristics and application methodology – indicated for children with mental disorders | Explanations<br>Demonstrations<br>Practice<br>Practical applications | **2** |
| Bibliography<br>Robănescu, N., Neuromotor re-education, 3rd edition, Medical Publishing House, Bucharest, 2001.<br>Robănescu, N., Treatment of Motor Sequelae of Infantile Encephalopathies, Medical Publishing House, Bucharest 1983.<br>Roşulescu, E., Zăvăleanu, M., Ilinca, I., Călina, M., Enescu, D., Kinetotherapy in Paediatric Conditions, Universitaria Publishing House, 2007. | | |

**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

The course content meets the need to acquire the theoretical and practical knowledge necessary for the recovery of paediatric patients, but also for the habilitation/rehabilitation of children with physical or mental disabilities, in line with the training requirements for specialists in paediatric rehabilitation working in the private or public sector, in medical or social fields (hospitals, rehabilitation clinics, medical-social assistance and rehabilitation centres).

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | Assessment of acquired knowledge | Written examination<br>Written | 50 |
| | | | |
| 11.2. Seminar/laboratory | Degree of participation active participation in practical work | Continuous assessment throughout the activity | 25 |
| | Practical assessment – practical demonstrations of techniques and manoeuvres applied to the patient | Practical oral examination | 25 |
| 11.3. Minimum performance standard | | | |
| - at least 2 interventions during interactive courses<br>- obtaining a grade of 5 in the theoretical exam/multiple-choice test<br>- obtaining a grade of 5 in the practical assessment<br>- acquisition and demonstration of the ability to apply a practical recovery programme using physiotherapy techniques and methods on children. | | | |

| Date of completion | Signature of course instructor | Signature of the seminar lecturer |
|---|---|---|
| 01. 09.2025 | Assoc. Prof. Dr. Roșulescu Eugenia | Assoc. Prof. Dr. Roșulescu Eugenia |
| | | Assoc. Prof. Dr. Zăvăleanu Mihaela |
| | | Assistant Professor Drd. Roșulescu Radu. |

| Date of approval by the department | Signature of the head of department |
|---|---|
| 15 | Prof. Rusu Ligia |

**UNIVERSITY OF CRAIOVA - FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

# SUBJECT DESCRIPTION
# 2027

## 1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinesitherapy and special motor *skills/Physiokinesitherapist - COR code 226401; Kinesitherapist - COR code 226405;* |

**2. Information about the discipline**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **INTERNSHIP IN BALNEO-ORTHOPEDIC UNITS - PEDIATRICS** | | | | | | |
| 2.2 Course coordinator | - | | | | | | |
| 2.3 Seminar coordinator(s) | Prof. Ligia Rusu, PhD<br>Assistant Professor Piele Denisa<br>Assistant Professor Geambesa Michi<br>Assistant Professor Cătălin Popa<br>Assistant Professor Roșca Andreea | | | | | | |
| 2.4 Year of study | **III** | 2.5 Semester | **V** | 2.6 Type of assessment | **V** | 2.7 Course requirements | **DOB** |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | **2** | of which: 3.2 lectures | - | 3.3 seminar/laboratory | **2** |
| 3.4 Total hours in the curriculum | **28** | of which: 3.5 course | - | 3.6 seminar/laboratory | **28** |

| Distribution of time | hours |
|---|---|
| Study using textbooks, course materials, bibliography and notes | **24** |
| Additional documentation in the library, on specialised electronic platforms and in the field | **20** |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | **22** |
| Tutoring | **-** |
| Examinations | **4** |
| Other activities | **2** |

| | |
|---|---|
| 3.7 Total hours of individual study | **72** |
| 3.8 Total hours per semes | **10** |
| 3.9. Number of credits | **4** |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Completion of the following courses: Kinetotherapy in orthopaedic and paediatric conditions |
| 4.2 Skills | Knowledge of fundamental theoretical and practical concepts within the disciplines: specialisation |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | - |

| | |
|---|---|
| 5.2 for conducting seminar/laboratory | Kinetics recovery room, equipped with specialised apparatus and specific to kinetic therapy in specialised cardiovascular, respiratory and neurological rehabilitation institutions, such as hospitals and polyclinics. |

**6. Skills**

| | |
|---|---|
| 6.1. Key competencies | CC4, CC5 |
| 6.2. Professional skills | CP3, CP10, CP11, CP12, CP13, CP30, CP31, CP56, CP59 |
| 6.3. Transversal | CT1, CT2, CT5, CT6 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | The student defines the general, structural and functional concepts of the human body, with a view to developing kinetic rehabilitation programmes for people diagnosed with cardiovascular, respiratory or neurological disorders. |
| 7.2.Skills/abilities | Students identify the structures and functions of the human body and methods for assessing biological functions. |
| 7.3. Responsibility and autonomy | Students integrate fundamental concepts regarding the structures and functions of the human body into the kinetic rehabilitation process.<br>They recognise the characteristics of movement and their parameters necessary for the implementation of kinetic recovery protocols for people with cardiovascular, respiratory or neurological pathologies. |

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | Assessment, functional diagnosis and application of kinetic methods, knowledge of the fundamental aspects of the child's neuropsychological development, the morphological and functional characteristics of the child at each stage of development, as well as in-depth study of functional assessment methods.<br> Acquisition of practical knowledge for the development of an appropriate kinesitherapeutic programme for recovery after orthopaedic and traumatic conditions. |
| 8.2. Specific objectives | Developing the ability to analyse, synthesise and interpret the concept of science in a modern way, perspectives on approaching it from the point of view of theoretical disciplines, deepening therapeutic principles, recovery objectives and physical-kinetic means that can be applied in the complex treatment of neuropaediatric and orthopaedic-traumatic conditions.<br> Developing the ability to use correct specialist language |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| | - | - |
| Bibliography: - | | |
| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
| 1. Participation in the joint and muscle assessment of patients with orthopaedic and paediatric conditions, in the assessment of posture and body alignment | **Practical demonstrations, discussions, case studies and presentations.** | 4 |
| 2. Participation in the preparation of records, assessments and treatment documents | | 4 |
| 3. Participation in recovery programmes for orthopaedic conditions. Methodological characteristics | | 4 |
| 4. Participation in post-traumatic recovery programmes. Methodological characteristics | | 4 |
| 5. Participation in practical massage applications | | 4 |
| 6. Participation in massage therapy sessions | | 4 |
| 7. Participation in recovery programmes for paediatric conditions. Methodological characteristics | | 4 |


Bibliography
1. Drăgan, I., (2002), Sports Medicine, Medical Publishing House, Bucharest
2. Fozza, C., (1995), Corrective Gymnastics and Massage, Romanian Athenaeum Society, Ecological University of Bucharest
3. Fozza, C., Antonescu, A., (1995), Guide for Correcting Physical Deficiencies in Schoolchildren, Romanian Athenaeum Society, Ecological University of Bucharest
4. Kiss, I., (2002), Physiokinesitherapy and Medical Recovery, Bucharest, Medical Publishing House
5. Motet, D., (2011), Kinetotherapy for the benefit of children. Correcting physical deficiencies in children, Ed. Semne, Bucharest
6. Sbenghe, T., (2002), Prophylactic, Therapeutic and Recovery Kinetology, Bucharest, Editura Medicala


**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

| |
|---|
| The course content is corroborated with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme |

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | - | - | - |
| 11.2. Seminar/laboratory | Developing a kinetic intervention | Practical exam | 90% |

| | | | |
|---|---|---|---|
| | programme, with justification for the use of those concepts, theories, models, techniques and methods of kinetic intervention | | |
| | | Activity during the semester | 10 |
| 11.3. Minimum performance standard<br>Developing a kinetic intervention programme, with justification for the use of those concepts, theories, models, techniques and methods of kinetic intervention | | | |
| Method of assessing the minimum volume of knowledge:<br>- obtaining a Pass grade in the assessment. | | | |

Date of completion

1.09.2025 Signature of the course coordinator Signature of the laboratory coordinator

-

Prof. Ligia Rusu, PhD
Assistant Professor Piele Denisa
Assistant Professor Dr. Geambesa Michi
Assistant Professor Popa Cătălin
Assistant Professor Dr. Roșca Andreea

Date of approval by the department
15.09.2025

Signature of the head of department
Prof. Rusu Ligia

**UNIVERSITY OF CRAIOVA-FEFS**

**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

**SUBJECT DESCRIPTION**

**2027-2028**

## 1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Science of Sport and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and Special Motor Skills/Physiokinetotherapist - *COR code 226401; Kinetotherapist - COR code 226405* |

## 2. INFORMATION ABOUT THE DISCIPLINE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | | | **SCIENTIFIC RESEARCH METHODS** | | | | |
| 2.2 Course coordinator | | | **Assoc. Prof. Dr. Băcănoiu Manuela Violeta** | | | | |
| 2.3 Seminar coordinator(s) | | | **Assistant Professor Piele Denisa** | | | | |
| 2.4 Year of study | 3 | 2.5 Semester | V | 2.6 Type of assessment | C | 2.7 Course requirements | DOB |

## 3. TOTAL ESTIMATED TIME (hours per semester, teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | **2** | of which: 3.2 lectures | **1** | 3.3 seminar/laboratory | **1** |
| 3.4 Total hours in the teaching plan | **28** | of which: 3.5 Course | **14** | 3.6 Seminar/laboratory | **14** |
| Distribution of time | | | | | hours |
| ▪ Study based on textbook, course materials, bibliography | | | | | **20** |
| ▪ Additional documentation in the library, on specialised electronic platforms and in the field | | | | | **16** |

| | |
|---|---|
| ▪ Preparation for seminars/laboratories, assignments, reports, portfolios and essays | **6** |
| ▪ Tutoring | **-** |
| ▪ Examinations | **3** |
| ▪ Other activities: consultations, student clubs | **2** |

| | |
|---|---|
| **3.7 Total hours of individual activities** | **47** |
| 3.8 Total hours per semester | **75** |
| 3.9 Number of credits | **3** |

**4. PREREQUISITES** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Proper acquisition of knowledge taught in the specialised subjects related to the bachelor's degree programme |
| 4.2 Skills | Fulfilment of minimum standards for professional and transversal competences specific to the study programme |

**5. CONDITIONS** (where applicable)

| | |
|---|---|
| 5.1. Course delivery | room with technical equipment - PC, video projector, screen or online platform/Classroom |
| 5.2. for conducting the seminar/laboratory/project | room with technical equipment - PC, video projector, screen or online platform/Classroom |

**6. SKILLS**

| | |
|---|---|
| **6.1. Key competences** | CC3, CC4, CC5, CC7 |
| **6.2. Professional competences** | CP1, CP2, CP3, CP7, CP8, CP18, CP19, CP20, CP22, CP23, CP24, CP26, CP27, CP 30, CP 31, CP34, CP35, CP36, CP37, CP40, CP50, CP51, CP56, CP57, CP58 |
| **6.3. Transversal competences** | CT1, CT3, CT6, CT7, CT9, CT10, CT11, CT12, CT13, CT14, CT16, CT17, CT18 |

**7. LEARNING OUTCOMES**

| | |
|---|---|
| **7.1. Knowledge** | -The student/graduate defines the general, structural and functional concepts of the human body in order to develop rehabilitation programmes.<br><br>-Identify general and age-specific behavioural aspects, pathology and population categories before, during and after intervention in order to maximise the effects of the rehabilitation process.<br><br>-Identify elements of national and EU legislation and policies in the exercise of the profession. |
| **7.2. Skills/**<br><br>**skills** | The student/graduate explains the role of the psychological system in the rehabilitation process and demonstrates new techniques and methods for influencing the subject's behaviour. |
| **7.3. Responsibility and autonomy** | The student/graduate applies national and international legislation governing relations between rehabilitation service providers and beneficiaries. |

**8. COURSE OBJECTIVES** (based on the competency grid)

| | |
|---|---|
| 8.1 General objective of the discipline | Acquiring the methodological principles of scientific research in kinesitherapy and applying scientific methodological knowledge to plan, write and publicly defend scientific papers/bachelor's theses/dissertations. |
| 8.2 Specific objectives | - knowledge and understanding of scientific research methods, as well as the principles of approach techniques and mechanisms for organising such activities;<br><br>- development of research tools (questionnaires, interview guides, observation sheets, experimental protocols, etc.);<br><br>- formulation of research issues based on available resources;<br><br>- applying research methods in practice within a project, scientific paper, dissertation/master's thesis;<br><br>- understanding the mechanism of data processing and statistical analysis;<br><br>- effective use of bibliographic data;<br><br>- developing scientific research skills through interdisciplinary connections with theoretical and applied disciplines. |

**9. CONTENTS**

| **9.1 Course** | No. of hours | Teaching methods |
|---|---|---|
| 1. Concepts, requirements and attitudes of scientific research in kinesiotherapy. | 2 | Lectures on the Google Classroom platform |
| 2. Stages and dynamics of scientific research. | 2 | |
| 3. Ethical principles in scientific research. | 2 | |
| 4. Sources of documentation in scientific research | 2 | |
| 5. Planning and organising the research concept (setting research objectives, formulating hypotheses, developing a coherent, uniform research project) | 2 | |
| 6. Development: scientific report, scientific essay, case study. | 2 | |
| 7. Research materials and methods (study samples, data collection, materials and working protocols, conducting experiments) | 2 | |
| 8. Qualitative data collection methods (interview: terminology, classification criteria, interview dynamics) | 2 | |
| 9. Basic vocabulary of statistics: statistical unit, sample, population, statistical characteristics. | 2 | |
| 10. Case study methodology | 2 | |
| 11. Qualitative and quantitative statistical variables | 2 | |
| 12. Data analysis and interpretation | 2 | |
| 13. Study design | 2 | |
| 14. Publication of scientific research data | 2 | |
| TOTAL HOURS | 28 | |

**Bibliography**

- Chelcea S. (2010) - How to write a bachelor's thesis, a doctoral thesis, a scientific article in the field of social sciences and humanities, 4th edition, Ed. Comunicare.ro, Bucharest ,

- Chirazi, M. (2016) - Research Methods in Physical Education and Sport, Ed. Alexandru Ioan Cuza University, Iași ,

- Curtis, E., Drennan, Jonathan (2013). *Quantitative Health Research: Issues And Methods*. Maidenhead: Open University Press .

-Eco, U. (2014) - How to write a bachelor's thesis, Revised edition, Ed. Polirom, Iași.

-Epuran M. (2005) - Methodology of research into physical activities: physical exercise, sport, fitness, FEST Publishing House, Bucharest.

-Epuran M., Vâjială G.E. (2008) – Research methodology in physical education and sport, Ed. Romania of Tomorrow Foundation, Bucharest.

-Galea I. (2010) - Methodology of scientific research in physical education and sport: syntheses and applications, Aurel Vlaicu University Publishing House, Arad.

-Gheorghiu G (2003) – Course on scientific research methodology in physical education and sport, Published by the Lower Danube University Foundation, Galaţi.

-Turcu I. (2007) - Research Methodology in Physical Education and Sport, Transilvania University Press, Braşov.

| **9.2 Seminar/laboratory** | No. of hours | Teaching methods |
|---|---|---|
| 1. Criteria for choosing a research topic. | 2 | Debate, dialogue, presentation, demonstration, examples – lectures on the Google Classroom platform |
| 2. Stages and dynamics of scientific research. | 2 | |
| 3. Ethics in scientific research. | 2 | |
| 4. Sources of documentation in the research of phenomena. | 2 | |
| 5. Observation. | 2 | |
| 6. Experimental methods and techniques used in the research process. | 2 | |
| 7. Statistical analysis of data. | 2 | |
| 8. Scientific research results. | 2 | |
| 9. Discussions and interpretations. | 2 | |

| | | |
|---|---|---|
| 10. Conclusions of scientific research. | 2 | |
| 11. Proper preparation of bibliographic notes. | 4 | |
| 12. Drafting and public defence of scientific papers. | 4 | |
| TOTAL HOURS | 28 | |

**Bibliography**


-Chelcea S. (2010) - How to write a bachelor's thesis, a doctoral thesis, a scientific article in the field of social sciences, 4th edition, Ed. Comunicare.ro, Bucharest,

-Chirazi, M. (2016) - Research methods in physical education and sport, Ed. Alexandru Ioan Cuza University, Iași,

-Curtis, E., Drennan, Jonathan (2013). *Quantitative Health Research: Issues And Methods*. Maidenhead: Open University Press,

-David, D. (2006). *Clinical Research Methodology. Fundamentals.* Iași: Polirom.

-Eco, U. (2014) - How to write a bachelor's thesis, Revised edition, Polirom Publishing House, Iași.

-Epuran M. (2005) - Methodology of Researching Physical Activities: Exercise, Sport, Fitness, FEST Publishing House, Bucharest.

-Epuran M., Vâjială G.E. (2008) – Research Methodology in Physical Education and Sport, Ed. Romania of Tomorrow Foundation, Bucharest.

-Galea I. (2010) – Scientific Research Methodology in Physical Education and Sport: Syntheses and Applications, Ed. Aurel Vlaicu University, Arad.

-Gheorghiu G (2003) – Course on scientific research methodology in physical education and sport, Ed. Lower Danube University Foundation, Galaţi.

-Turcu I. (2007) - Research Methodology in Physical Education and Sport, Transilvania University Press, Braşov.


**10. Corroboration of the course content with the expectations of representatives of the community professional associations and representative employers in the field related to the programme**

In the process of developing the course, discussions were initiated with doctors and physiotherapists from physical education and sports faculties, as well as graduates employed in the field. The content is also correlated with that of courses with similar titles taught at prestigious European universities.

**11. EVALUATION**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final grade |
|---|---|---|---|
| 11.4 Course | - correct assimilation of the concepts taught;<br>- a comprehensive understanding of the importance of the subject studied and its connection to other fundamental subjects;<br>- logical coherence;<br>- degree of assimilation of specialised language. | Scientific paper assessment | 70% |
| 11.5 Seminar /laboratory | acquisition of the notions, concepts and issues taught in the course and their application in practice;<br>- ability to develop a scientific project. | Developing a scientific project | 30% |
| 11.6 Minimum performance standard | | | |
| - Correctly learning basic theoretical concepts and applying them in developing a scientific project. | | | |

**Date of completion: 01.09.2025**

**Signature of course lecturer** **Signature of the seminar lecturer**

Assoc. Prof. Dr. Băcănoiu Manuela Violeta Assistant Prof. Dr. Piele Denisa

**Date of approval by the department:** **Signature of the head of department**

 Prof. Ligia Rusu

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

# SUBJECT DESCRIPTION
# 2027

## 1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Orthotics-*Prosthetics*/*Physiokinesitherapist - COR code 226401;*<br>*Kinetotherapist - COR code 226405;* |

## 2. Information about the discipline

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **ORTHOTICS-PROSTHETICS** | | | | | | |
| 2.2 Course coordinator | Lecturer Dr. Ilie Eva | | | | | | |
| 2.3 Seminar coordinator(s) | Assistant Professor Dr. Geambesa Michi | | | | | | |
| 2.4 Year of study | III | 2.5 Semester | V | 2.6 Type of assessment | C | 2.7 Course requirements | DOB |

## 3. Total estimated time (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 2 | of which: 3.2 lectures | 1 | 3.3 seminar/laboratory | 1 |
| 3.4 Total hours in the curriculum | 28 | of which: 3.5 course | 14 | 3.6 seminar/laboratory | 14 |

| Distribution of time | hours |
|---|---|
| Study using textbooks, course materials, bibliography and notes | 10 |
| Additional documentation in the library, on specialised electronic platforms and in the field | 6 |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | |
| Tutoring | - |
| Examinations | 4 |
| Other activities | 2 |

| | |
|---|---|
| 3.7 Total hours of individual study | 22 |
| 3.8 Total hours per semester | 50 |
| 3.9. Number of credits | 2 |

## 4. Prerequisites (where applicable)

| | |
|---|---|
| 4.1 Curriculum | General principles of kinesitherapy, Anatomy and biomechanics, Kinesitherapy in orthopaedic and traumatic conditions |
| 4.2 Skills | Not applicable |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | • room with technical equipment - PC, video projector, screen<br>• 50% attendance required |
| 5.2 Seminar/laboratory the seminar/laboratory | • room with equipment necessary for conducting laboratory activities - PC, video projector, screen, special equipment (orthoses/exoprostheses), physiotherapy materials, tables, chairs, equipment necessary for the proper conduct of activities<br>• 80% attendance required |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC2, CC3, CC4, CC5, CC7 |
| 6.2. Professional skills | CP1, CP2, CP9, CP11, CP26, CP27, CP29, CP56 |
| 6.3. Transversal competences | CT1, CT2, CT3, CT6, CT7, CT8, CT13, CT14, CT16, CT17, CT18 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | - General notions about motor skills and motor activity – important for understanding how orthotic/prosthetic devices influence movement and functional recovery.<br>- Anatomical and functional concepts of the human body – absolutely necessary for designing and adapting orthoses/prostheses to the structural and functional characteristics of the patient.<br>- Physiopathological and anatomopathological mechanisms of diseases – useful for understanding the pathologies that require orthotics/prosthetics and for choosing the most appropriate technical solutions.<br>- General and specific behavioural aspects (related to age, pathology, population categories) – essential for adapting devices to real needs and maximising patient compliance.<br>- Elements of national/EU legislation and policies – very important, as orthoses and prostheses are strictly regulated medical devices, and professional practice is carried out in accordance with European and national standards. |
| 7.2. Skills/abilities | 1.1. Use of fundamental concepts of human motor function in various contexts – necessary |

| | |
|---|---|
| | in order to adapt devices to movement.<br>1.2. Use of terminology according to motor activities – for accurate communication with the multidisciplinary team.<br>2.1. Identifying the structures and functions of the human body ( ) and assessment methods – basis for designing orthoses/prostheses.<br>2.2. Presentation of the actions of different muscle groups and movement parameters – useful in the functional adaptation of devices.<br>3.1. Presentation of general disease mechanisms – important for understanding orthotic/prosthetic indications.<br>4.1. Explaining the role of the human psyche in the rehabilitation process – relevant for patient acceptance and use of devices.<br>5.1. Application of international and national legislation on rehabilitation services – absolutely necessary, as orthoses and prostheses are strictly regulated as medical devices. |
| 7.3. Responsibility and autonomy | 1.1.1. Illustrates motor acts, actions and activities – important for understanding the impact of orthoses/prostheses on movement.<br>1.2.1. Justify the use of specialised terminology – necessary for clear communication within the medical team.<br>1.3.1. Identify the duties of the physiotherapist within interdisciplinary teams – relevant because the manufacture/adaptation of devices involves collaboration with doctors, therapists and technicians.<br>2.1.1. Integrate fundamental concepts regarding the structures and functions of the human body into the rehabilitation process – basis for adapting devices.<br>2.2.1. Recognise movement characteristics and their parameters – useful for correlating the orthosis/prosthesis with motor function.<br>3.1.1. Recognise the changes induced by pathology and their causes – essential for identifying indications for orthosis/prosthesis.<br>4.2.1. Use professional communication techniques before, during and after the intervention – very important for the therapist-patient relationship in adapting and training on the use of the device.<br>5.1.1. Complies with legal and professional standards in the relationship with beneficiaries – absolutely necessary, as orthoses and prostheses are legally regulated medical devices. |

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**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | The **Orthotics and Prosthetics** discipline aims to develop the knowledge and skills necessary for the functional assessment of patients and the application of orthotic and prosthetic devices in an manner, in compliance with professional standards and current legislation. At the same time, it develops communication, ethical and interdisciplinary collaboration skills to support the rehabilitation and improvement of patients' quality of life. |
| 8.2. Specific objectives | - Acquiring fundamental knowledge of the concepts, principles and specialist terminology used in the field of orthotics and prosthetics.<br>- Analysis of the structure and functionality of the musculoskeletal system in physiological and pathological conditions, with an emphasis on implications for mobility and functional independence.<br>- Identification and comparison of different types of orthoses and prostheses in relation to clinical indications, materials used and effects on patient recovery.<br>- Application of clinical and functional assessment methods for the selection and customisation of orthotic and prosthetic devices.<br>- Explaining the particularities of the recovery process in patients using orthoses and prostheses, in correlation with the specifics of the pathology and therapeutic objectives.<br>- Familiarisation with modern technologies and assistive devices used in rehabilitation (bionic prosthetics, electronic devices, gait analysers, virtual reality).<br>- Developing professional communication and interdisciplinary collaboration skills for the correct implementation of orthotic and prosthetic solutions.<br>- Practising ethical responsibility and compliance with national and European legislation on the prescription, adaptation and use of medical devices.<br>- Stimulating interest in research and innovation in the field of orthotics, prosthetics and assistive technologies.<br>- Developing interest and involvement in research activities |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| **1. Introduction to the field**: the role of orthotic and prosthetic devices and assistive technology in functional recovery; general concepts regarding their use and classification. | Interactive presentation (debate) of the content according to the analytical programme, using both classical methods and modern resources. PowerPoint presentations, educational videos and various auxiliary teaching aids will be used. | 1 hour |
| **2. Criteria for classifying orthoses**: according to age (adults/children), type of condition and body segment targeted. | idem | 1 hour |

| | | |
|---|---|---|
| **3. Patient assessment**: stages of clinical and functional examination, collaboration within the multidisciplinary team to establish indications for orthotics or prosthetics. | idem | 1 hour |
| **4. Structure and manufacture of devices**: selection of materials, principles of design and individual adaptation of orthoses and prostheses. | idem | 1 hour |
| **5. Fundamentals of spinal biomechanics:** assessment methods and implications for rehabilitation. | idem | 1 hour |
| **6. Devices for spinal disorders:** types of cervical, thoracolumbar and lumbosacral orthoses used in spinal trauma, hernias, chronic pain and osteoporosis. | idem | 1 hour |
| **7. Orthotics in spinal disorders:** use of devices in scoliosis, kyphosis, lordosis and dystonia. | idem | 1 hour |
| **8. Upper limb orthotics:** anatomical and biomechanical principles; types of orthotics for conditions such as stroke, trauma, rheumatoid arthritis, nerve damage or carpal tunnel syndrome. | idem | 1 hour |
| **9. Upper limb prosthetics:** types of prostheses (partial hand, fist, elbow, shoulder); clinical aspects of phantom pain, residual pain and motor control re-education. | idem | 1 hour |
| **10. Lower limb orthotics:** orthotics, orthopaedic footwear and walking aids; clinical applications in static disorders, strokes, trauma and tendon or ligament disorders. | idem | 1 hour |
| **11. Lower limb prosthetics:** assessment and management of amputees, post-operative care, prosthesis fitting and gait training instruction. | idem | 1 hour |
| **12. Orthotics in paediatrics:** use of devices in children with congenital malformations or progressive conditions (muscular dystrophies, atrophies, myelomeningocele, neuropathies). | idem | 1 hour |
| **13. Orthotics in cerebral palsy:** types of orthotics and their impact on functionality and quality of life. | idem | 1 hour |
| **14. Modern technologies in** | idem | 1 hour |

| | | |
|---|---|---|
| **rehabilitation:** principles and clinical applications of assistive technologies, medical robots, functional electrical stimulation and electronic devices for daily activities. | | |

Bibliography

Rusu Ligia- "Orthotics and prosthetics in kinesitherapy", Universitaria Publishing House, 2007
Christopher Morris, Luciano Dias – "Paediatric orthotics", Mc Keith Press, 2007
John D. Hsu, John W. Michael, John R. Fisk – "Atlas of Orthoses and Assistive Devices", Ed. Mosby 2008
Popescu, R. & Trăistaru, R- Recovery of the upper limb with orthosis and prosthesis. Second edition. Ed.Medicală Universitară, Craiova, 2010

| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
|---|---|---|
| **1. Introduction**: basic concepts and practical demonstrations regarding the role of orthoses, prostheses and assistive devices in the recovery process. | - Visit to an orthotics centre to familiarise yourself with the infrastructure and materials used.<br>- Case studies for applying clinical reasoning in the selection of orthoses/prostheses.<br>- Brainstorming to identify effective assistive solutions.<br>- Demonstrations and practical applications regarding the evaluation, prescription and use of devices.<br>- Practising the handling and application of orthoses/prostheses.<br>- Recording observations and results in the internship notebook. | 1 hour |
| **2. Clinical presentations**: examples of orthotic and prosthetic devices and assistive devices; practical visit to the orthotics and prosthetics laboratory; materials used and manufacturing principles; making moulds. | idem | 1 hour |
| **3. Clinical and functional assessment**: setting therapeutic goals and indications for orthoses/prostheses; introduction to joint and muscle assessment for upper and lower limbs. | idem | 1 hour |
| **4. Spinal orthotics (I)**: clinical reasoning and practical exercises for spinal cord | idem | 1 hour |

| | | |
|---|---|---|
| injuries, cervical and lumbar disc herniation, chronic pain and osteoporosis. Types of appropriate orthotics. | | |
| **5. Spinal orthotics (II)**: application of orthotics in dystonia and static disorders (scoliosis, kyphosis, lordosis). Assessment methods and recovery plans: posture, manual therapy, respiratory gymnastics, psychological support. | idem | 1 hour |
| **6. Upper limb orthotics**: anatomical and biomechanical principles; types of orthotics (police, fingers, fist, elbow, shoulder) and their use in stroke, trauma, rheumatoid arthritis, peripheral neuropathies, carpal tunnel syndrome, brachial plexus injuries. | idem | 1 hour |
| **7. Upper limb prosthetics**: classification of prostheses (body-powered, external, aesthetic). Clinical situations and levels of amputation (partial hand, fist, elbow, shoulder). Strategies for training motor control. | idem | 1 hour |
| **8. Lower limb biomechanics**: analysis of normal and pathological gait; use of orthoses to correct plantar static disorders (talus valgus/varus, flat foot, equinus, hallux valgus, metatarsalgia). Orthopaedic shoes and walking aids; approach to diabetic foot. | idem | 1 hour |
| **9. Lower limb orthotics**: types of orthoses (ankle-foot, knee-ankle-foot, thigh-knee-ankle-foot, for fractures) and their indications in stroke, trauma, ligament ruptures, tendon injuries and neuropathies. | idem | 1 hour |
| **10. Lower limb prosthetics**: types of prostheses according to the level of amputation (partial, transtibial, transfemoral, knee or hip disarticulation). Stages of prosthetic patient management: postoperative care, prosthesis fitting, gait re-education. Patient education and family support. | idem | 1 hour |
| **11. Soft casts**: use of adhesive bandages , elastic bandages and tape; therapeutic objectives, application techniques and effects on recovery. | idem | 1 hour |
| **12. Functional electrical stimulation (FES)**: basic principles and clinical applications; types of orthoses based on | idem | 1 hour |

| | | |
|---|---|---|
| neuromuscular stimulation for upper and lower limbs. | | |
| **13. Assistive technology**: solutions for mobility impairments, communication disorders, visual, hearing, cognitive or learning impairments; electronic devices to support activities of daily living and ergonomics. | idem | 1 hour |
| **14. Modern recovery technologies**: equipment for training and assisting walking, medical robots, bionic prostheses, virtual reality applications and other innovations in rehabilitation. | idem | 1 hour |
| Bibliography:<br>Sbenghe, T. – Kinesiology – the science of movement, Medical Publishing House, Bucharest, 2002<br>Delia Cinteza, Daniela Poenaru – Orthotics in Medical Recovery, Ed. VOX, Bucharest, 2004<br>Christopher Morris, Luciano Dias – Paediatric Orthotics, McKeith Press, 2007<br>John D. Hsu, John W. Michael, John R. Fisk – Atlas of Orthoses and Assistive Devices, Mosby Publishing, 2008 | | |

**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

The training of students aims to develop the theoretical and practical skills necessary for integration into the labour market, focusing on information essential for future practitioners. Collaboration with the orthotics-prosthetics laboratory at the Orthoprothetics Centre offers students the opportunity to experience first-hand the specifics and demands of the profession.

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final grade (%) |
|---|---|---|---|
| 11.1. Course | The final assessment is carried out through a written colloquium, consisting of 10 questions with written answers, which is held within a period of 60 minutes and has a maximum score of 10 points. Obtaining a grade of 5 requires a minimum of 5 points, and for a grade of 10, the full score of 10 points is required. | Colloquium (written) | **50** |
| | | | |
| 11.2. Seminar/laboratory | The practical activity | Colloquium (practical) | **50%** |

| | | | |
|---|---|---|---|
| | involves: presenting a pathology as indicated by the teacher, assessing the patient, selecting and applying (as far as possible) an orthosis, prosthesis or assistive device, justifying the clinical reasoning, and developing a recovery programme adapted to the pathology and specific situation. The role, importance and principles of physiotherapy in the respective context are also explained, and the internship notebook is evaluated.<br>180 minutes will be reserved.<br>**Assessment criteria:**<br>**For a grade of 5** – understanding of the basic pathological mechanism affecting function and correct choice of orthosis, prosthesis or assistive device.<br>**For a grade of 10** – demonstration of a thorough understanding of the pathological mechanism, complete assessment of the patient, correct and justified choice of device, explanation of clinical reasoning and the role of physiotherapy, active participation in practical work, presentation of a h e model of recovery through physiotherapy (with practical examples alongside a colleague) and the quality of the internship notebook. | | |

| | | | |
|---|---|---|---|
| | | | |
| 11.3. Minimum performance standard | | | |
| **The minimum passing grade is 5.**<br><br>Failure to pass the practical exam limits access to the final exam. | | | |

| Date of completion | Signature of course lecturer lecturer | Signature of the seminar |
|---|---|---|
| 01.09.2025 | Lecturer Dr. Ilie Eva | Assistant Lecturer Dr. Geambesa Michi |

| Date of approval by the department | Signature of the head of department |
|---|---|
| 15.09.2025 | Prof. Rusu Ligia |

**COURSE DESCRIPTION**

**2027-2028**

## 1. PROGRAMME INFORMATION

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/department | Faculty of Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies[1] | Bachelor's degree - cycle 1 |
| 1.6 Study programme (name/code)[2] /Qualification | Kinetotherapy and special motor skills/Physiokinetotherapist - COR code 226401;<br>Kinetotherapist - COR code 226405; |

## 2. INFORMATION ABOUT THE DISCIPLINE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | | | | **KINETOPROPHYLAXIS** | | | |
| 2.2 Course coordinator | | | | **Associate Professor Ilinca Ilona** | | | |
| 2.3 Seminar coordinator | | | | **Associate Professor Ilinca Ilona** | | | |
| 2.4 Year of study | **3** | 2.5 Semester | **V** | 2.6 Type of assessment | **C** | 2.7 Course requirements (compulsory) | **DOB** |

## 3. TOTAL ESTIMATED TIME (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | **2** | of which: 3.2 course | **1** | 3.3 seminar/laboratory/project | **1** |
| 3.4 Total hours in the curriculum | **28** | of which: 3.5 course | **14** | 3.6 seminar/laboratory/project | **14** |
| 3.7 Distribution of time | | | | | hours |
| ▪ Study using textbooks, course materials, bibliography and notes | | | | | 5 |
| ▪ Additional documentation in the library, on specialised electronic platforms and in the field | | | | | 5 |

| | |
|---|---|
| ▪ Preparation for seminars/laboratories, assignments, reports, portfolios and essays | 5 |
| ▪ Tutoring | - |
| ▪ Examinations | 4 |
| ▪ Other activities: consultations, student clubs | 3 |

| | |
|---|---|
| **Total hours of individual activities** | **22** |
| 3.8 Total hours per semester | **50** |
| 3.9 Number of credits | **2** |

**4. PREREQUISITES** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Knowledge of applied anatomy, semiology, kinesitherapy |
| 4.2 Skills | Performing specific kinesitherapy assessments, applying specific techniques |

**5. CONDITIONS** (where applicable)

| | |
|---|---|
| 5.1. Course delivery | Room equipped with projector, laptop/computer, internet access and online platforms, electronic materials (ppt, .doc, .pdf, video, films, images) |
| 5.2. for conducting the seminar/laboratory/project | Kinetotherapy room equipped with the necessary equipment and facilities for practical work |

**6. SKILLS**

| | |
|---|---|
| 6.1. Key competences | CC2, CC4 |
| 6.2. Professional competences | CP3, CP9, CP12, CP15, CP19 |
| 6.3. Transversal competences | CT1, CT2, CT9, CT16, CT18 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | - The student defines the general, structural (anatomical) and functional concepts of the human body, with a view to developing rehabilitation programmes. |
| 7.2.Skills | - Students identify the structures and functions of the human body and methods for assessing biological functions.<br><br>- Students present the actions of different muscle groups and movement parameters. |
| 7.3. Responsibility and autonomy | - Students integrate fundamental concepts regarding the structures and functions of the human body into the rehabilitation process.<br><br>- Students recognise the characteristics of movement and their parameters. |

**8. COURSE OBJECTIVES** (based on the competency grid)

| | |
|---|---|
| 7.1 General objective of the discipline | - Designing specific k kinetoprophylactic programmes for different conditions |
| 7.2 Specific objectives | - Training of physiotherapists capable of mastering a system of knowledge regarding: the principles, methods and means of primary, secondary and tertiary prevention in various conditions.<br>- Knowledge and application of specific assessment of patients benefiting from kinetoprophylactic programmes.<br>- Developing the practical skills necessary for selecting and applying the means and methods, procedures and methods specific to kinesitherapy.<br>- Training of physiotherapists capable of developing and applying prophylactic and sanogenetic activities for individuals of different age groups and various professional activities. |

**9. CONTENT**

| **9.1. Course** | Teaching methods | No. of hours |
|---|---|---|
| - Kinetoprofilaxis: definition, classification, general objectives, specific objectives, concept of health, concept of prophylaxis. | ▪ Presentation of theoretical concepts using PowerPoint<br>▪ Interactive courses based on debates on course | 2 |
| - Kinetoprophylaxis in chronic disease | | 1 |
| - Physical condition: definition, components, assessment | | 3 |

| | | |
|---|---|---|
| - Kinetoprophylaxis in diabetes mellitus | notes or previously acquired knowledge | 2 |
| - Kinetoprophylaxis in cardiovascular pathology | | 2 |
| - Kinetoprophylaxis of osteoporosis | | 2 |
| - Kinetoprophylaxis of obesity | | 2 |

Bibliography

1.Banciu M. General balneophysiotherapy and modern concepts of recovery, Vol. I, Mirton Publishing House, Timişoara, 1996

2.Ilinca I., - Kinetoprofilaxie, Universitaria Publishing House, Craiova 2008.

3.Sbenghe,T.- Prophylactic, therapeutic and recovery kinetology, Medical Publishing House, 1987.

4. Sbenghe, T. - Kinesiology – the science of movement, Medical Publishing House, Bucharest, 2002.

5. Balint, T. Kinetotherapy – an alternative in combating obesity, 2006.

| **9.2.Seminar/laboratory** | Teaching methods | No. of hours |
|---|---|---|
| Specific features of kinesitherapy programmes for improving physical condition | Lecture + debate + studies - Presentations of<br>Case + Demonstration | 2 |
| Specific features of kinetoprophylactic programmes in the management of physical deconditioning and sarcopenia | | 2 |
| Particularities of kinetoprophylactic programmes in the management of diabetes mellitus | | 2 |
| Features of kinesitherapy programmes in the management of arterial hypertension | | 2 |
| Features of kinetoprophylactic programmes in the management of osteoporosis | | 2 |
| Particularities of kinetoprophylactic programmes in the management of obesity | | 2 |
| Recap | | 2 |

Bibliography

1.Banciu M. General balneophysiotherapy and modern concepts of recovery, Vol. I, Mirton Publishing House, Timişoara, 1996

2.Ilinca I., - Kinetoprofilaxie, Universitaria Publishing House, Craiova 2008.

3.Sbenghe,T.- Prophylactic, therapeutic and recovery kinetology, Medical Publishing House, 1987.

4. Sbenghe, T. - Kinesiology – the science of movement, Medical Publishing House, Bucharest, 2002.

5. Balint, T. Kinetotherapy - an alternative in combating obesity, 2006.

**10. CORRELATION OF THE CONTENTS OF THE DISCIPLINE WITH THE EXPECTATIONS OF REPRESENTATIVES OF THE EPISTEMIC COMMUNITY, PROFESSIONAL ASSOCIATIONS AND REPRESENTATIVE EMPLOYERS IN THE FIELD RELATED TO THE PROGRAMME**

The content corresponds to the needs of the labour market and the requirements of the scientific community.

**11. EVALUATION**

| Type of activity | 11.1 Evaluation criteria | 11.2 Evaluation methods | 11.3 Weighting in the final mark |
|---|---|---|---|
| 11.1 Course | Level of active participation in classes<br>Level of mastery of course content | Written exam consisting of a multiple-choice test | 60 |
| 11.2 Practical activities | Degree of active participation in practical activities<br><br>Preparation and delivery of individual reports | Assessment of ways to structure a kinetoprofilactic programme for a patient with a pre-established theme<br><br>Presentation of the individual report in PPT format | 40 |
| 11.3 Minimum performance standard<br><br>▪ At least 2 interventions during interactive classes<br>▪ Obtaining a grade of 5 in the written exam assessing theoretical knowledge<br>▪ Demonstration of willingness to apply a kinetoprophylactic programme specific to the pathology in question<br>▪ Preparation and submission of reports<br>▪ Obtaining a grade of 5 in the assessment of practical activities | | | |

Date of completion Signature of the course lecturer Signature of the seminar holder

01.09.2025 Associate Professor Ilinca Ilona Associate Professor Ilinca Ilona

Date of approval by the department Signature of the head of department

15.09.2025 Prof. Rusu Ligia

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

**SUBJECT DESCRIPTION**
**2027**

**1. Programme details**

| | |
|---|---|
| 1.1 Higher education institution | **University of Craiova** |
| 1.2 Faculty | **Physical Education and Sport/Department 6** |
| 1.3 Department | **Kinesiotherapy and Sports Medicine** |
| 1.4 Field of study | **Sports Science and Physical Education** |
| 1.5 Cycle of studies | **Bachelor's degree - cycle I** |
| 1.6 Study programme/Qualification | **Kinetotherapy and Special Motor Skills/Physiokinetotherapist - *COR code 226401; Kinetotherapist - COR code 226405*** |

**2. Information about the discipline**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | | | **COMMUNICATION IN PHYSIOTHERAPY** | | | | |
| 2.2 Course coordinator | | | **Assoc. Prof. Dr. Băcănoiu Manuela Violeta** | | | | |
| 2.3 Seminar coordinator(s) | | | **Assistant Professor Cătălin Popa** | | | | |
| 2.4 Year of study | 3 | 2.5 Semester | V | 2.6 Type of assessment | C | 2.7 Discipline regime | DOP |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | **2** | of which: 3.2 lectures | 1 | 3.3 seminar/laboratory | 1 |
| 3.4 Total hours in the curriculum | **28** | of which: 3.5 course | 14 | 3.6 seminar/laboratory | 14 |
| Distribution of time | | | | | hours |
| Study based on textbook, course materials, bibliography | | | | | 8 |
| Additional documentation in the library, on specialised electronic platforms and in the field | | | | | 6 |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | | | | | 5 |
| Tutoring | | | | | - |
| Examinations | | | | | 2 |
| Other activities: consultations, student clubs | | | | | 1 |
| 3.7.Total hours of individual study | **2** | | | | |

| | |
|---|---|
| 3.8 Total hours per semester | **5** |
| 3.9 Number of credits | **2** |

**4. PREREQUISITES** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Proper acquisition of knowledge taught in the specialised subjects related to the bachelor's degree programme. |
| 4.2 Skills | Fulfilment of the minimum standards for professional and transversal competences specific to the study programme |

**5. CONDITIONS** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | room with technical equipment - PC, video projector, screen |
| 5.2 Seminar/laboratory seminar/laboratory | room with technical equipment - PC, video projector, screen |

**6. SKILLS**

| | |
|---|---|
| **6.1. Key competences** | **CC3, CC4, CC5, CC7** |
| **6.2. Professional competences** | **CP1, CP2, CP3, CP6, CP7, CP8, CP18, CP19, CP22, CP23, CP24, CP26, CP27, CP34, CP35, CP36, CP37, CP50, CP56, CP57** |
| **6.3. Transversal competences** | **CT1, CT3, CT6, CT7, CT10, CT12, CT13, CT14, CT16, CT17, CT18** |

**7. LEARNING OUTCOMES**

| | |
|---|---|
| **7.1. Knowledge** | -The student/graduate defines the general, structural and functional concepts of the human body in order to develop rehabilitation programmes.<br>-Identify general and age-specific behavioural aspects, pathology and population categories before, during and after intervention in order to maximise the effects of the rehabilitation process.<br>-Identify elements of national and EU legislation and policies in the exercise of the profession. |
| **7.2. Skills/ skills** | The student/graduate explains the role of the psychological system in the rehabilitation process and demonstrates new techniques and methods for influencing the subject's behaviour. |
| **7.3. Responsibility and autonomy** | The student/graduate applies national and international legislation governing relations between rehabilitation service providers and beneficiaries. |

**8. COURSE OBJECTIVES** (based on the competency grid)

| | |
|---|---|
| **8.1. General objective of the discipline** | To learn the general concepts of communication when approaching patients who access physiotherapy recovery programmes. |
| **8.2. Specific objectives** | To explain the behaviour of the physiotherapist ( ) and the addressability within a physiotherapy programme, for prophylactic, curative or recovery purposes. |

**9. CONTENT**

| **9.1 Course** | Teaching methods | No. of hours |
|---|---|---|

| | | |
|---|---|---|
| 1. Communication - general principles, characteristics and levels of communication | Lecture | 2 hours |
| 2. Verbal communication (language, speech and action). | | 2 hours |
| 3. Communication as a skill (communication barriers, classification). | | 2 hours |
| 4. Oral communication (communication techniques, planning and delivering an oral presentation). | | 2 hours |
| 5. Dialogue and interview. | | 2 hours |
| 6. Written communication (CV writing, letters of intent/motivation, recommendations) | | 2 hours |
| 7. Non-verbal communication | | 2 hours |

Bibliography
1. Chelcea, S. (2005). Non-verbal communication. Gestures and posture. Bucharest: Comunicare.ro Publishing House.
2. Dumitru, I. (2010). Communication in medical and healthcare professions. Iași: Polirom Publishing House.
3. Popescu, G. M., & Albu, M. (2008). Fundamentals of psychology for healthcare professionals. Bucharest: Editura Universitară.
4. Zlate, M. (2000). Psychology of cognitive mechanisms. Bucharest: Polirom Publishing House.
5. Purves, D., Augustine, G. J., & Fitzpatrick, D. (2018). Neuroscience (6th ed.). New York: Oxford University Press.
6. Hall, A. M., Ferreira, P. H., Maher, C. G., Latimer, J., & Ferreira, M. L. (2010). The influence of the therapist–patient relationship on treatment outcome in physical rehabilitation: A systematic review. 7. Physical Therapy, 90(8), 1099–1110. https://doi.org/10.2522/ptj.20090245
8. Leach, M. J. (2005). Rapport: A key to treatment success. Complementary Therapies in Clinical Practice, 11(4), 262–265. https://doi.org/10.1016/j.ctcp.2005.05.005.

| **9.2 Seminar/laboratory** | Teaching methods | No. of hours |
|---|---|---|
| 1. The contribution of kinesitherapy to individual psychosocial development | Lecture | 2 |
| 2. Obstacles to optimal communication between physiotherapist, patient and family. | Lecture | 2 hours |
| 3. Techniques for improving communication dynamics | Lecture Conversation, debate, problem-solving | 2 hours |
| 4. Motivational stimulation of the patient | Lecture | 2 hours |
| 5. Ethical and professional conduct in the physiotherapist-patient relationship | Lecture Conversation, debate, problem-solving | 2 hours |
| 6. Physiotherapy counselling in the recovery process | Lecture | 2 hours |
| 7. Empathy and emotional intelligence. | Lecture Conversation, debate, problem-solving | 2 hours |

Bibliography
1. Chelcea, S. (2005). Nonverbal communication. Gestures and posture. Bucharest: Comunicare.ro Publishing House.
2. Dumitru, I. (2010). Communication in the medical and healthcare professions. Iași: Polirom Publishing House.
3. Popescu, G. M., & Albu, M. (2008). Fundamentals of psychology for healthcare professionals. Bucharest: Editura Universitară.
4. Zlate, M. (2000). Psychology of cognitive mechanisms. Bucharest: Polirom Publishing House.

5. Purves, D., Augustine, G. J., & Fitzpatrick, D. (2018). Neuroscience (6th ed.). New York: Oxford University Press.
6. Hall, A. M., Ferreira, P. H., Maher, C. G., Latimer, J., & Ferreira, M. L. (2010). The influence of the therapist–patient relationship on treatment outcome in physical rehabilitation: A systematic review. 7. Physical Therapy, 90(8), 1099–1110. https://doi.org/10.2522/ptj.20090245
8. Leach, M. J. (2005). Rapport: A key to treatment success. Complementary Therapies in Clinical Practice, 11(4), 262–265. https://doi.org/10.1016/j.ctcp.2005.05.005.

**10. Corroboration of the course content with the expectations of representatives of professional associations and employers in the field relevant to the programme**

The discipline provides students with a methodological framework and responds to the needs of professional associations and employers through its content. It represents a starting point for those who wish to pursue master's and doctoral studies and advanced scientific research, providing the necessary skills for the public and private sectors in Romania and the European Union.

**11. EVALUATION**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| **11.1 Course** | - correct assimilation of the concepts taught;<br>- overall understanding of the importance of the subject studied and its connection to other fundamental subjects;<br>- logical coherence;<br>- degree of assimilation of specialised language | Scientific paper assessment | 70 |
| **11.2 Seminar/ Laboratory** | Acquiring the notions, concepts and issues taught in the course and applying them in practice;<br>- Ability to develop a scientific project | Scientific paper assessment | 30 |
| | | - | - |
| **11.3** Minimum performance standard (minimum knowledge required to pass the course and how it is assessed) | | | |
| Development of a physiotherapy intervention programme, with justification of the use of those concepts, theories, models, techniques and methods of physiotherapy intervention. | | | |

Date of completion: 01.09.2025

Signature of course coordinator
, PhD Băcănoiu

Signature of the seminar coordinator
ManuelaVioleta , PhD Popa Cătălin, PhD

Date of approval by the department: 15.09.2025 Prof. Ligia Rusu

Signature of the head of department

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINETOTHERAPY AND SPORTS MEDICINE (D06)**

**SUBJECT DESCRIPTION**
**2027-2028**

**1. Programme details**

| | |
|---|---|
| 1.1 Higher education institution | **University of Craiova** |
| 1.2 Faculty | **Physical Education and Sport/Department 6** |
| 1.3 Department | **Kinesiotherapy and Sports Medicine** |
| 1.4 Field of study | **Sports Science and Physical Education** |
| 1.5 Cycle of studies | **Bachelor's degree - cycle I** |
| 1.6 Study programme/Qualification | **Kinetotherapy and special motor skills/Physiokinetotherapist -** ***COR code 226401; Kinetotherapist - COR code 226405*** |

**2. Information about the discipline**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | | | **NEUROPHYSIOLOGY** | | | | |
| 2.2 Course coordinator | | | **Associate Professor Dr. Băcănoiu Manuela Violeta** | | | | |
| 2.3 Seminar coordinator(s) | | | **Assistant Professor, PhD candidate Roșulescu Radu** | | | | |
| 2.4 Year of study | 3 | 2.5 Semester | V | 2.6 Type of assessment | C | 2.7 Course requirements | DOP |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 2 | of which: 3.2 lectures | 1 | 3.3 laboratory | 1 |
| 3.4 Total hours in the curriculum | 28 | of which: 3.5 lectures | 14 | 3.6 laboratory | 14 |
| Distribution of time | | | | | hours |
| • Study using textbooks, course materials, bibliography | | | | | 10 |
| • Additional documentation in the library, on specialised electronic platforms | | | | | 9 |
| • Preparation for seminars/laboratories, assignments, reports, portfolios and essays | | | | | 2 |

| | |
|---|---|
| • Tutoring | - |
| • Examinations | 1 |
| • Other activities: consultations, student circles | - |

| | |
|---|---|
| **3.7 Total hours of individual activities** | 2 |
| 3.8 Total hours per semester | 50 |
| 3.9 Number of credits | 2 |

**4. PREREQUISITES** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Proper acquisition of knowledge taught in the specialised subjects related to the bachelor's programme. |
| 4.2 Skills | Fulfilment of minimum standards for professional and transversal competences specific to the study programme |

**5. CONDITIONS** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | room with technical equipment - PC, video projector, screen or online platform |
| 5.2 for conducting the seminar/laboratory/project | room with technical equipment - PC, video projector, screen or online platform |

**6. SKILLS**

| | |
|---|---|
| **6.1. Key competences** | CC3, CC4, CC5, CC7 |
| **6.2. Professional skills** | CP1, CP2, CP3, CP6, CP7, CP8, CP9, CP11, CP14, CP15, CP18, CP19, CP22, CP23, CP24, CP26, CP27, CP30, CP34, CP35, CP36, CP37, CP45, CP50, CP56, CP57 |
| **6.3. Transversal competences** | CT1, CT3, CT6, CT7, CT8, CT10, CT12, CT13, CT14, CT16, CT17, CT18 |

**7. LEARNING OUTCOMES**

| | |
|---|---|
| **7.1. Knowledge** | - The student/graduate defines the general notions of the field related to the concepts of motor skills and motor activity, the structure and functions of human motor activities, their effects on development and education to be used in the rehabilitation process.<br>- The student/graduate defines the general, structural and functional concepts of the human body in order to develop rehabilitation programmes.<br>- Identifies general and age-specific behavioural aspects, pathology and population categories before, during and after intervention in order to maximise the effects of the rehabilitation process.<br>-Identify elements of national and EU legislation and policies in the exercise of the profession. |

| | |
|---|---|
| **7.2. Skills/ skills** | -The student/graduate uses fundamental concepts and terminology in the field of human motor skills, distinguishing the role of the physiotherapist in different professional situations.<br>- The student/graduate presents the actions of different muscle groups and movement parameters.<br>-The student/graduate explains the role of the mental system in the rehabilitation process and demonstrates new techniques and methods for influencing the subject's behaviour. |
| **7.3. Responsibility and autonomy** | -The student/graduate exemplifies motor acts, actions and activities, recognises the characteristics of movement and their parameters,<br>-The student/graduate applies national and international legislation governing the relationship between rehabilitation service providers and beneficiaries. |

**8. COURSE OBJECTIVES** (based on the competency grid)

| | |
|---|---|
| **8.1 General objective of the discipline** | Knowledge of general concepts of neurophysiology of the nervous system, cybernetic schemes of neurotransmission and recognition of major neurological emergencies. |
| **8.2 Specific objectives** | Explaining the neurophysiological bases of mental processes and behaviour behaviour, as well as the neurophysiological assessment of the individual. |

**9. CONTENT**

| **9.1 Course** | **Teaching methods** | **No. of hours** |
|---|---|---|
| 1. Neurophysiology of nervous tissue. Cellular mechanisms of excitability, electrogenesis of the excitation process | Lecture | 2 |
| 2. Chemical and electrical synapses in the CNS. Neurotransmitters and neuromodulators of the CNS | Lecture | 2 hours |
| 3. Reflex action and arc - the morphofunctional basis of the CNS<br>(postural and locomotor reflexes). Sensory-sensory function of the nervous system (receptors, conduction pathways, supramedullary and subcortical structures, cortical centres, sensory cortical areas) | Lecture | 2 hours |
| 4. Neuromuscular receptors. Motor activity of the nervous system (motor functions of the spinal cord, brainstem, subcortical levels and motor cortex). | Lecture | 2 hours |
| 5. Control of voluntary motor activity, the role of the cerebral cortex and association areas (cytoarchitecture and neurophysiology of the cerebral cortex). | Lecture | 2 hours |
| 6. Analysers – the conduction segment of the CNS (acoustic, vestibular, optic, kinesthetic analysers) | Lecture | 2 hours |
| 7. Muscle contraction mechanisms (molecular and functional basis of striated muscle fibre) | Lecture | 2 hours |

| **9.2 Seminar/laboratory** | **Teaching methods** | **No. of hours** |
|---|---|---|
| 1. Neurophysiology of nerve fibres | Lecture | 2 |
| 2. Reflex and conduction function of the spinal cord. Somatic function of the CNS. Monosynaptic and polysynaptic reflexes | Lecture | 2 hours |
| 3. Pyramidal and extrapyramidal systems | Lecture | 2 |
| 4. Primary motor cortex and additional motor areas serving | Lecture | 2 hours |

| | | |
|---|---|---|
| motor function | | |
| 5. Acoustic-vestibular analyser. Optical analyser | Lecture | 2 hours |
| 6. Kinesthetic analyser | Lecture | 2 hours |
| 7. Neurophysiology of muscle fibre contraction and relaxation. Muscle fatigue | Lecture | 2 hours |

**Bibliography**

-Physiology and pathophysiology of the nervous system. Gh Badiu, I. Teodorescu Exarcu, Ed. Medicala Bucharest (1978)
-Physiology. Arthur C. Guyton, (1996) Ed. Amaltea Bucharest.
-Clinical Neuroelectrophysiology. Leon Zagrean. Ed. Universitara "Carol Davila" Bucharest 2005
-Nelson, Cassandra Rae, "Cross-Bridge Mechanisms of Skeletal Muscle Fatigue: Effects of Hydrogen Ion, Inorganic Phosphate, and Age" (2014). http://epublications.marquette.edu/dissertations_mu/379/,
-Gonzalez-Serratos, H., Del Carmen-Garcia, M. (1992) - Differential activation of myofibrils during fatigue in twitch skeletal muscle fibres of the frog. - Muscular Contraction, (ed. Simmons., R.M.), Cambridge University Press, Cambridge, 117-126,
-Walter F. Boron, Medical Physiology, ed.3, Bucharest 2017.

**10. Corroboration of the course content with the expectations of representatives of professional associations and employers in the field relevant to the programme**

The discipline provides students with a methodological framework and responds to the needs of professional associations and employers through its content. It represents a starting point for those who wish to pursue master's and doctoral studies and advanced scientific research, providing the necessary skills for the public and private sectors in Romania and the European Union.

**11. EVALUATION**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark |
|---|---|---|---|
| **11.1 Course** | - correct assimilation of the concepts taught;<br>- a comprehensive understanding of the importance of the subject studied and its connection to other fundamental subjects;<br>- logical coherence;<br>- degree of assimilation of specialised language | Assessment grid/report | 70 |
| **11.2 Seminar/ laboratory** | acquiring the notions, concepts and issues taught in the course and applying them in practice;<br>- ability to develop a scientific project | - Development of a scientific project | 30% |
| | | | |

**11.3 Minimum performance standard** (minimum knowledge required to pass the course and how it is assessed)

Developing a physiotherapy intervention programme, with justification for the use of those concepts, theories, models, techniques and methods of physiotherapy intervention.

**Date of completion:** 01.09.2025

**Signature of course coordinator**
Assoc. Prof. Dr. Băcănoiu ManuelaVioleta

**Signature of the seminar coordinator**
Assist. Prof. Dr. Roșulescu Radu

**Date of approval by the department:**
15.09.2025

**Signature of the head of department**
Prof. Rusu Ligia

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

# SUBJECT DESCRIPTION
**2027-2028**

## 1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor skills - Physiokinetotherapist - COR code 226401; Kinetotherapist - COR code 226405 |

## 2. Information about the discipline

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **Social work** | | | | | | |
| 2.2 Course coordinator | Associate Professor Neamţu Oana Maria | | | | | | |
| 2.3 Seminar coordinator(s) | Assistant Professor Drd. Brăguță Andreea | | | | | | |
| 2.4 Year of study | III | 2.5 Semester | V | 2.6 Type of assessment | C | 2.7 Discipline regime | DOP |

**3. Total estimated time** (hours per semester for teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 2 | of which: 3.2 lectures | 1 | 3.3 seminar/laboratory | 1 |
| 3.4 Total hours in the curriculum | 28 | of which: 3.5 course | 14 | 3.6 seminar/laboratory | 14 |

| Distribution of time | hours |
|---|---|
| Study using textbooks, course materials, bibliography and notes | 8 |
| Additional documentation in the library, on specialised electronic platforms and in the field | 6 |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | 2 |
| Tutoring | - |
| Examinations | 4 |
| Other activities | 2 |

| | |
|---|---|
| 3.7 Total hours of individual study | 2 |
| 3.8 Total hours per semester | 50 |
| 3.9 Number of credits | 2 |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | NO |
| 4.2 Competency | NO |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | • room with technical equipment - PC, video projector, screen |
| 5.2 for conducting the seminar/laboratory | • room with technical equipment - PC, video projector, screen |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC4, CC5 |
| 6.2. Professional skills | CP2, CP6, CP7, CP26, CP35, CP56, CP 57, CP58 |
| 6.3. Transversal skills | CT1, CT5, CT6, CT17 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | The student explains the fundamental concepts of psychotherapy used primarily in social work. |
| 7.2. Skills/abilities | Acquiring theoretical and practical knowledge so that students can deepen their understanding of the fundamental aspects of psychotherapy and social work, as well as deepening their knowledge of psychological assessment and therapy methods in the field.<br>- Deepening therapeutic principles, recovery goals and means that can be applied in the complex treatment of psychiatric disorders. |

| | |
|---|---|
| | - Acquiring clinical aspects, recovery objectives and methods used in social work. |
| 7.3. Responsibility and autonomy | Demonstrate the ability to work individually and in a team to perform practical tasks of anatomical identification and analysis.<br>Takes responsibility for the correct application of anatomical concepts in educational and professional contexts.<br>Integrates knowledge of functional anatomy into the decision-making process, adapting solutions to specific clinical situations in the field of kinesitherapy. |

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | Acquiring and effectively using fundamental knowledge of psychotherapy in social work in the educational and professional process. |
| 8.2. Specific objectives | • Acquiring the concepts of psychotherapy in social work<br>• Adapting the information conveyed to students to the specifics of the specialisation<br>• Acquiring practical information that will enable students to apply it in various situations they will encounter in their chosen professional field of physiotherapy |

**9. Content**

| **9.1.Course** | **Teaching methods** | **No. of hours** |
|---|---|---|
| 1. Introduction to psychotherapy | Lecture | 1 |
| 2. Statistical characteristics of psychological testing | Lecture | 1 |
| 3. Sensation. | Lecture | 1 |
| 4. Visual function. | Lecture | 1 |
| 5. Differential psychology | Lecture | 1 |
| 6. Child psychology. | Lecture | 1 |
| 7. Psychology of the elderly | Lecture | 1 |
| 8. History of social work. | Lecture | 1 |
| 9. Child social work | Lecture | 1 |
| 10. Social assistance for single-parent families | Lecture | 1 |
| 11. Social assistance for the elderly. | Lecture | 1 |
| 12. Social assistance for persons with disabilities | Lecture | 1 |
| 13. Duties of the social worker | Lecture | 1 |
| 14. The influence of personality on social work practice | Lecture | 1 |
| Bibliography<br>The Psychology of Cognitive Mechanisms, Zlate M, Polirom Publishing House, 1999<br>Treatise on social work, Neamţu G., Polirom Publishing House, 2003<br>Elements of Social Work, Neamţu G., Polirom Publishing House, 1999 | | |
| **9.2.Seminar/laboratory** | **Teaching methods** | **No. of hours** |
| 1. Introduction to psychotherapy | Practical work | 1 |

| | | |
|---|---|---|
| 2. Statistical characteristics of psychological testing | Practical work | 1 |
| 3. Sensation. | Practical work | 1 |
| 4. Visual function. | Practical work | 1 |
| 5. Differential psychology | Practical work | 1 |
| 6. Child psychology. | Practical work | 1 |
| 7. Psychology of the elderly | Practical work | 1 |
| 8. History of social work. | Practical work | 1 |
| 9. Child social work | Practical work | 1 |
| 10. Social assistance for single-parent families | Practical work | 1 |
| 11. Social assistance for the elderly. | Practical work | 1 |
| 12. Social assistance for persons with disabilities | Practical work | 1 |
| 13. Duties of the social worker | Practical work | 1 |
| 14. The influence of personality on social work practice | Practical work | 1 |
| Bibliography<br>The Psychology of Cognitive Mechanisms, Zlate M, Polirom Publishing House, 1999<br>Treatise on social work, Neamţu G., Polirom Publishing House, 2003<br>Elements of Social Work, Neamţu G., Polirom Publishing House, 1999 | | |

**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

| |
|---|
| In order to efficiently and effectively carry out the tasks involved in organising and conducting specific physiotherapy interventions, in-depth knowledge of psychotherapy as applied to social work is required. Cooperation with recovery services in hospitals and recovery centres in order to achieve these goals |

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weighting in the final mark (%) |
|---|---|---|---|
| 11.1. Course | Attendance<br>Correct explanation of concepts and notions | Written exam (multiple choice test) | 80 |
| | | | |
| 11.2. Seminar/laboratory | Attendance | Periodic assessments | 20 |
| | | | |
| 11.3. Minimum performance standard | | | |
| | | | |

| Date of completion | Signature of course coordinator | Signature of the seminar coordinator |
|---|---|---|
| 01.09.2025 | Associate Professor Neamţu Oana Maria | Assistant Professor Brăguță Andreea |

| Date of approval by the department | Signature of the head of department |
|---|---|
| 15.09.2025 | Prof. Dr. Rusu Ligia |

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

# SUBJECT DESCRIPTION
# 2027

## 1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Pain therapy/*Physiokinesitherapist - COR code 226401; Kinetotherapist - COR code 226405;* |

## 2. Information about the discipline

| | |
|---|---|
| 2.1 Name of the discipline | **PAIN THERAPY** |
| 2.2 Course coordinator | Lecturer Dr. Ilie Eva |
| 2.3 Seminar coordinator(s) | Assistant Professor Dr. Piele Denisa |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.4 Year | III | 2.5 Semester | V | 2.6 Type of assessment | C | 2.7 Course requirements | DOP |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 2 | of which: 3.2 lectures | 1 | 3.3 seminar/laboratory | 1 |
| 3.4 Total hours in the curriculum | 28 | of which: 3.5 course | 14 | 3.6 seminar/laboratory | 14 |

| Distribution of time | hours |
|---|---|
| Study using textbooks, course materials, bibliography and notes | 7 |
| Additional documentation in the library, on specialised electronic platforms and in the field | 4 |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | 7 |
| Tutoring | - |
| Examinations | 3 |
| Other activities | 1 |

| | |
|---|---|
| 3.7 Total hours of individual study | 2 |
| 3.8 Total hours per semester | 50 |
| 3.9. Number of credits | 2 |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Anatomy, Biomechanics, Physiology, Understanding the general principles of medical recovery and kinesitherapy. |
| 4.2 Skills | Not applicable |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | • room with technical equipment - PC, video projector, screen<br>• 50% attendance required |
| 5.2 Seminar/laboratory the seminar/laboratory | • room equipped with the necessary materials for laboratory activities - PC, video projector, screen, physiotherapy materials, tables, chairs, equipment necessary for the proper conduct of activities<br>• 80% attendance required |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC2, CC3, CC4, CC5 |
| 6.2. Professional skills | CP1, CP2, CP3, CP5, CP6, CP7, CP8, CP9, CP10, CP14, CP15, CP17, CP19, CP24, CP25, CP26, CP27, CP32, CP34, CP55, CP57 |
| 6.3. Transversal skills | CT1, CT2, CT3, CT5, CT6, CT7, CT11, CT12, CT13, CT16, CT17, CT18 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | **The student/graduate explains** the general |

| | |
|---|---|
| | concepts of pain mechanisms (neurophysiological, biochemical and psychological) and its effects on function and quality of life, to be used in the rehabilitation process.<br>**The student/graduate defines** the anatomical and functional structures involved in the perception and transmission of pain, in order to choose appropriate therapeutic strategies.<br>**The student/graduate describes** the biochemical, pathophysiological and psychosocial mechanisms associated with acute and chronic pain, in order to substantiate pain recovery and management programmes.<br>The **student/graduate identifies** the behavioural and emotional characteristics of patients with pain (depending on age, pathology and context) in order to maximise the effects of therapy and support treatment compliance.<br>**The student/graduate is** familiar with the elements of national and European legislation and policies relating to the rights of patients with pain and professional practice in the field. |
| 7.2. Skills/abilities | **The student/graduate:**<br>**1.1.** Uses fundamental concepts regarding pain mechanisms and the body's response to pain in various clinical contexts.<br>**1.2.** Correctly uses specialist terminology related to pain assessment and management.<br>**1.3.** Distinguishes the role and place of the physiotherapist in the multidisciplinary team involved in pain therapy.<br>**The student/graduate:**<br>**2.1.** Identifies the structures and functions of the systems involved in pain perception and transmission, as well as methods for assessing pain.<br>**2.2.** Presents muscle actions and changes in movement parameters influenced by acute or chronic pain.<br>**The student/graduate:**<br>**3.1.** Presents fundamental notions regarding the general and specific mechanisms of pain production (nociceptive, neuropathic, psychogenic).<br>**3.2.** Characterises the biochemical and pathophysiological changes associated with pain and the body's response to stress or exertion.<br>**The student/graduate:**<br>**4.1.** Explains the role of psychological and |

| | |
|---|---|
| | emotional factors in pain perception and management.<br>**4.2.** Demonstrate methods and techniques for influencing the behaviour of patients in pain, in order to increase compliance with treatment.<br>**The student/graduate:**<br>**5.1.** Applies national and international legislation relating to the rights of patients with pain and the provision of rehabilitation services. |
| 7.3. Responsibility and autonomy | **The student/graduate:**<br>**1.1.1.** Illustrates types of pain (acute, chronic, nociceptive, neuropathic) and associated clinical manifestations.<br>**1.2.1.** Argues for the use of specialised terminology regarding pain assessment and management in relevant debates.<br>**1.3.1.** Identifies the responsibilities of the physiotherapist within interdisciplinary pain management teams.<br>**The student/graduate:**<br>**2.1.1.** Integrates fundamental concepts regarding the structures and mechanisms involved in pain perception and transmission in the rehabilitation process.<br>**2.2.1.** Recognises changes in motor parameters influenced by the presence of pain and their impact on functionality.<br>**The student/graduate:**<br>**3.1.1.** Recognises changes induced by pain and their causes in different clinical contexts.<br>**3.2.1.** Establishes physical effort parameters adapted to the patient with pain, depending on the and intervention objectives.<br>**The student/graduate:**<br>**4.1.1.** Identifies the relationship between psychological factors and pain perception in various pathologies.<br>**4.2.1.** Uses professional communication techniques to counsel patients in pain before, during, and after intervention.<br>**The student/graduate:**<br>**5.1.1.** Complies with legal and professional standards regarding the rights of patients with pain and the ethical principles of rehabilitation. |

**8. Course objectives** (based on the competency grid)

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|---|---|
| 8.1. General objective of the discipline | The **Pain Therapy** discipline aims to develop the theoretical and practical knowledge and skills necessary for assessing and managing pain, applying physiotherapy and kinesiotherapy interventions adapted to the type of pain and |

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| | the patient's context, in accordance with professional protocols and standards, as well as the development of communication, empathy and interdisciplinary collaboration skills to maximise the effectiveness of the rehabilitation process and improve patients' quality of life. |
| 8.2. Specific objectives | **Providing theoretical knowledge** on the pathophysiological, biochemical and neurophysiological mechanisms of acute and chronic pain.<br>**Assessment of patients with pain**, identifying the type, intensity and mechanisms of pain, using standardised measurement tools.<br>**Application of physiotherapeutic and kinetic methods** to reduce pain and improve function, individually tailored to the patient and the type of pain.<br>**Integrating complementary and innovative techniques** (manual therapy, electrotherapy, relaxation techniques, functional stimulation) into the treatment plan.<br>**Developing clinical reasoning** for choosing appropriate interventions, with a view to patient safety and treatment effectiveness.<br>**Promoting effective communication** with patients and their families to explain pain management strategies and encourage active involvement in the therapeutic process.<br>**Compliance with ethical principles and legislation** in the application of pain management therapies.<br>**Interdisciplinary collaboration** with doctors, physiotherapists, psychologists and other specialists to optimise the treatment programme.<br>**Monitoring and reassessing patient progress**, adjusting therapeutic strategies according to response to treatment.<br>**Developing self-learning and research skills** in the field of pain therapy in order to apply the latest protocols and techniques in practice. |

**9. Content**

| 9.1.Course | Teaching methods | No. of hours |
|---|---|---|
| 1. **Introduction to pain therapy:** The concept of pain (IASP definition), classifications (acute vs. chronic), the impact of pain on the patient's and society. | Interactive presentation (debate) of the content according to the analytical programme, using both classical methods and modern resources. PowerPoint presentations, educational videos and various auxiliary teaching aids will be used. | 1 hour |
| 2. **Pathophysiology of pain:** Nociceptive, neuropathic and mixed pain mechanisms. The role of the central and peripheral nervous system. | idem | 1 hour |
| 3. **Pain assessment:** Assessment methods and scales (VAS, NRS, | idem | 1 hour |

| | | |
|---|---|---|
| McGill Pain Questionnaire), functional and psychological assessment. | | |
| **4. Pain and the psychological system:** Psychological aspects, anxiety, depression, coping and influence on pain perception. | idem | 1 hour |
| **5. Acute and chronic pain:** Anatomy and physiology of the central and peripheral nervous system in the context of pain: mechanisms of pain signal transmission, central representation of pain, and types of peripheral nerve damage (sensory, sensory-motor, or mixed). | idem | 1 hour |
| **6. Principles of kinesitherapy in pain therapy:** Physical interventions and therapeutic exercises specific to the type of pain. | idem | 1 hour |
| **7. Manual techniques and mobilisation:** Therapeutic massage, joint mobilisation and stretching to reduce pain. | idem | 1 hour |
| **8. Electrotherapy and functional electrical stimulation:** TENS, EMS, NMES, principles and clinical applications in pain. | idem | 1 hour |
| **9. Hydrotherapy and thermal techniques:** Application of heat and cold, therapeutic baths , hydrokinesitherapy. | idem | 1 hour |
| **10. Cognitive-behavioural techniques and pain education:** Coping strategies, relaxation, biofeedback, patient education on pain. | idem | 1 hour |
| **11. Pain in specific pathologies:** Musculoskeletal, neurological, post-traumatic, post-operative pain and pain in chronic diseases. | idem | 1 hour |
| **12. Planning and adapting the intervention programme:** | idem | 1 hour |

| | | |
|---|---|---|
| Developing individualised plans, monitoring and reassessing progress. | | |
| **13. Chronic pain in inflammatory and degenerative rheumatic diseases:** differentiated approach to patients with acute versus chronic pain, using specific therapeutic strategies and methods within Medical Recovery. | idem | 1 hour |
| **14. Case studies and practical applications:** Analysis of clinical cases, clinical reasoning, choice of therapeutic methods and practical demonstrations. | idem | 1 hour |

Bibliography:

**Ion Cristea** – *Pain Therapy*, Medical Publishing House, 1996
**Ostin C. Mungiu, Dorel Săndesc, Aurel F. Marin** – *Pain Therapy*, Etna Publishing House, 2018John D. **Maria Magdalena Leon, Ostin C. Mungiu** – *Pain Therapy – Current Issues*, Gr. T. Popa Publishing House, 2015
**Christopher Eccleston, Christopher Wells, Bart Morlion (eds.)** – *European Pain Management*, Oxford University Press, 2018
**Julie Pilitsis** – *Pain Management Secrets*, Elsevier, 2016

| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
|---|---|---|
| **1. Introduction to pain therapy**<br>• Pain assessment: numerical scale, visual analogue scale, clinical questionnaires.<br>• Clinical observations and identification of pain type (acute vs chronic).<br>• Practical demonstrations: pain assessment in simulated patients. | Visit to the **Kineto ELS** recovery centres and **St. Nectarie Hospital** to familiarise yourself with the infrastructure and materials used in pain therapy .<br>-Case studies for applying clinical reasoning in choosing and adapting pain therapy techniques.<br>-Brainstorming sessions to identify the most effective methods of pain reduction and management.<br>-Demonstrations and practical applications regarding patient assessment, setting therapeutic goals, and | 1 hour |

| | | |
|---|---|---|
| | applying treatment techniques.<br>-Practising mobilisation procedures, therapeutic exercises, and complementary techniques for pain relief.<br>-Recording observations, progress and results in the internship notebook. | |
| 2. **Assessment of pain and upper limb function in patients with pain syndrome – demonstrations and practical applications**<br>• Observation and recording of signs and symptoms of pain in the shoulder, elbow, wrist and hand;<br>• Use of pain assessment scales (numerical, visual analogue, McGill);<br>• Application of clinical and functional tests to assess upper limb mobility, strength and coordination;<br>• Interpreting data to establish a functional profile and develop therapeutic recommendations. | idem | 1 hour |
| 3. **Assessment of pain and lower limb function in patients with pain syndrome – demonstrations and practical applications**<br>• Observation and recording of symptoms and signs of pain in the hip, knee, ankle and foot;<br>• Use of pain assessment scales (numerical, visual analogue, McGill) to quantify the intensity and nature of pain;<br>• Application of clinical and functional tests to assess mobility, muscle strength, balance and gait;<br>• Analysing data to identify the impact of pain on function and developing individualised therapeutic recommendations. | idem | 1 hour |

| | | |
|---|---|---|
| 4. **Physical therapy in cervical-dorsal pain syndromes – demonstrations and practical applications**<br>• Practical application of electrotherapy and thermotherapy for the relief of cervical and thoracic pain;<br>• Use of cervical and thoracic orthosis principles for pain relief;<br>• Observation of immediate effects on patient mobility, posture and comfort. | idem | 1 hour |
| **5. Manual techniques in pain therapy**<br>• Therapeutic massage, passive and active mobilisation.<br>• Practical application on colleagues: muscle relaxation and pain reduction techniques**.** | idem | 1 hour |
| **6. Electrotherapy and functional electrical stimulation**<br>• Principles and applicability in chronic and acute pain.<br>• Practical application of electrical stimulation and assessment of patient reactions . | idem | 1 hour |
| **7. Pain therapy through postural re-education and breathing exercises**<br>• Application of postural re-education techniques to correct muscle imbalances and reduce tension in the spine and adjacent muscles.<br>• Deep and controlled breathing exercises to relieve pain and relax the muscles involved.<br>• Observation of patient reactions and adjustment of positions and breathing exercises according to tolerance and effectiveness. | idem | 1 hour |
| 8. **Demonstrations and practical applications of physical** | idem | 1 hour |

| | | |
|---|---|---|
| **therapy for nociceptive and neuropathic pain:** pain assessment and specific clinical-functional tests, use of thermotherapy with analgesic effect, application of orthoses and explanation of their role in pain relief. | | |
| **9. Post-traumatic pain management**<br>• Kinesic and instrumental interventions.<br>• Case studies: patients with musculoskeletal trauma. | idem | 1 hour |
| **10. Pain therapy in chronic pathologies**<br>• Pain associated with fibromyalgia, arthritis, neuropathies.<br>• Practical exercise plans and pain reduction techniques. | idem | 1 hour |
| **11. Cognitive and relaxation techniques**<br>• Biofeedback, controlled breathing, progressive relaxation (elements from YOGA).<br>• Practical application on colleagues and simulation of interventions**.** | idem | 1 hour |
| **12. Pain therapy in cancer patients – practical work**<br>• Pain assessment in cancer patients using standardised scales and methods.<br>• Application of appropriate physiotherapy and kinesiotherapy techniques to relieve cancer-specific pain.<br>• Monitoring patient reactions and adapting the intervention programme according to symptom progression and individual tolerance – practical application on colleagues. | idem | 1 hour |
| **13. Interdisciplinary interventions**<br>• Collaboration with psychologists, | idem | 1 hour |

| | | |
|---|---|---|
| doctors, and physiotherapists.<br>• Case studies: developing a comprehensive treatment plan. | | |
| **14. Progress assessment and therapy adaptation**<br>• Reassessment of the patient and adjustment of the recovery programme.<br>• Practical exercise: completing progress charts and reporting results. | idem | 1 hour |


Bibliography:
**Ion Cristea** – *Pain Therapy*, Medical Publishing House, 1996
**Ostin C. Mungiu, Dorel Săndesc, Aurel F. Marin** – *Pain Therapy*, Etna Publishing House, 2018John D. **Maria Magdalena Leon, Ostin C. Mungiu** – *Pain Therapy – Current Issues*, Gr. T. Popa Publishing House, 2015
**Christopher Eccleston, Christopher Wells, Bart Morlion (eds.)** – *European Pain Management*, Oxford University Press, 2018
**Julie Pilitsis** – *Pain Management Secrets*, Elsevier, 2016
**John E. Sarno** – *Healing Back Pain: The Mind-Body Connection*, Warner Books, 1991
**Butler, David S. & Moseley, G. Lorimer** – *Explain Pain*, Second Edition, Noigroup Publications, 2013.


**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

The training of students aims to develop the theoretical and practical skills necessary for integration into the labour market, focusing on information that is essential for future practitioners. Collaboration with rehabilitation centres such as Kineto ELS and St. Nectarie Hospital offers students the opportunity to experience first-hand the specifics and demands of the profession. 11. Assessment

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final grade (%) |
|---|---|---|---|
| 11.1. Course | The final assessment is carried out through a written colloquium, consisting of 10 questions with written answers, which is held within 60 minutes and has a maximum score of 10 points. Obtaining a grade of 5 requires a minimum of 5 points, and for a grade of 10, the full score of 10 points is required. | Colloquium (written) | **50** |

| | | | |
|---|---|---|---|
| | | | |
| 11.2. Seminar/laboratory | **Practical activity involves:** presenting a pathology indicated by the teacher, assessing the patient, selecting and applying appropriate pain therapy techniques (e.g. therapeutic exercises, relaxation techniques, mobilisation, neuromuscular stimulation, respiratory re-education), justifying clinical reasoning and developing a treatment plan adapted to the pathology and specific situation. The role, importance and principles of pain therapy are explained, as well as how it is integrated into the recovery process. The internship notebook is evaluated.<br>180 minutes will be reserved.<br>**Assessment criteria:**<br>**-For a grade of 5:** understanding the pathological mechanism that causes pain and the correct application of the appropriate treatment technique.<br>**-For a grade of 10:** demonstration of a thorough understanding of the mechanism of pain, complete assessment of the patient, correct and justified application of the treatment technique, explanation of clinical reasoning, active participation in practical | Colloquium (practical) | **50%** |

| | | | |
|---|---|---|---|
| | work, presentation of a complete pain relief programme (with practical examples alongside a colleague) and appropriate quality of the internship notebook. | | |
| | | | |
| 11.3. Minimum performance standard | | | |
| **The minimum passing grade is 5.**<br><br>Failure to pass the practical exam limits access to the final exam. | | | |

| Date of completion | Signature of course lecturer | Signature of seminar lecturer |
|---|---|---|
| 01.09.2025 | Lecturer Dr. Ilie Eva | Assistant Professor Dr. Piele Denisa |

| Date of approval in the department | Signature of the head of department |
|---|---|
| 15.09.2025 | Prof. Ligia Rusu, PhD |

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

**SUBJECT DESCRIPTION**
**2027-2028**

**1. Programme details**

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor *skills/Physiokinetotherapist - COR code 226401;* |

| | |
|---|---|
| | *Kinetotherapist - COR code 226405;* |

**2. Information about the discipline**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **Physiotherapy** | | | | | | |
| 2.2 Course coordinator | **Assoc. Prof. Mihaela ZĂVĂLEANU** | | | | | | |
| 2.3 Seminar coordinator(s) | **Associate Professor Mihaela ZĂVĂLEANU**<br>**Lecturer Dr. GORGAN Anamaria** | | | | | | |
| 2.4 Year of study | III | 2.5 Semester | VI | 2.6 Type of assessment | E | 2.7 Course requirements | DOB |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 3 | of which: 3.2 lectures | 2 | 3.3 seminar/laboratory | 1 |
| 3.4 Total hours in the curriculum | 42 | of which: 3.5 course | 28 | 3.6 seminar/laboratory | 14 |

| Distribution of time | hours |
|---|---|
| Study using textbooks, course materials, bibliography and notes | 20 |
| Additional documentation in the library, on specialised electronic platforms and in the field | 20 |
| Preparation of seminars/laboratories, assignments, reports, portfolios and essays | 15 |
| Tutoring | 0 |
| Examinations | 3 |
| Other activities | - |

| | |
|---|---|
| 3.7 Total hours of individual study | 58 |
| 3.8 Total hours per semester | 10 |
| 3.9. Number of credits | 4 |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Anatomy, Semiology, Physiology, Pathophysiology |
| 4.2 Skills | Not applicable |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Room with technical equipment: PC, video projector, screen |
| 5.2 for conducting the the seminar/laboratory | Room/office equipped with physiotherapy equipment, PC, video projector, screen |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC2, CC3, CC4 |
| 6.2. Professional skills | CP1, CP2, CP4, CP5, CP10, CAP12, CP14, CP22, CP 28, CP 29, DP 30, CP 31 |
| 6.3. Transversal skills | CT2, CT3, CT5, CT6, CT7, CT8, CT9, CT 10 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | - The student/graduate identifies general and age-specific behavioural aspects, pathology and population categories before, during and after intervention, in order |

| | |
|---|---|
| | to maximise the effects of the rehabilitation process through physiotherapy methods and means. |
| 7.2. Skills/<br>Skills | The student/graduate:<br>2.1. Identifies the structures and functions of the human body and methods for assessing biological functions.<br>2.2. Presents the actions of different muscle groups and movement parameters.<br>3.1. Presents fundamental notions regarding the general mechanisms of disease production.<br>4.2. Demonstrate methods and techniques for influencing the subject's behaviour through physiotherapy techniques. |
| 7.3. Responsibility and autonomy | The student/graduate:<br>2.1.1. Integrates fundamental concepts regarding the structures and functions of the human body into the rehabilitation process through physiotherapy techniques<br>3.1.1. Recognises the changes induced by pathology and their causes.<br>4.2.1. Uses professional communication techniques before, during and after intervention |

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | - Acquiring the basic theoretical and specialist knowledge necessary to plan and perform effective physiotherapy interventions<br>- Developing the ability to perform a detailed clinical and functional assessment of patients in order to correctly identify the medical indications and contraindications for physiotherapy. |
| 8.2.Specific objectives | - Acquiring the essential specialised terminology to study relevant materials and practise in the field of physiotherapy,<br>- Knowledge of physiotherapy techniques and procedures and their applicability in current medical practice for various types of pathologies<br>- Knowledge and identification of temporary and permanent contraindications in the application of physiotherapy-specific treatment methods |

**9. Content**

| **9.1. Course** | **Teaching methods** | **No. of hours** |
|---|---|---|
| Presentation of the subject matter of the discipline. History. Definitions. Theoretical foundations - general concepts: electric field, classification of therapeutic electric currents, parameters of electric currents, general and local effects. | Interactive<br>Interactive | 3 |
| General and applied electrophysiology: resting and action potentials, depolarisation, repolarisation, stimulation and excitability, electrotonus, the law of polar excitability, accommodation, excitation impulse slope. | Interactive<br>interactive | 3 |
| Galvanic current. Iontophoresis - general biological effects, physiological and therapeutic effects, indications and contraindications, methods of application. | Interactive<br>interactive | 2 |
| Low-frequency currents. Diadynamic currents. - general biological effects, physiological and therapeutic effects, indications and contraindications, methods of application. | Interactive<br>interactive | 2 |
| Transcutaneous electrical nerve stimulation (TENS). Trabert electromassage – general biological effects, physiological and therapeutic effects, indications and contraindications, methods of application. | Interactive<br>course<br>interactive | 2 |
| Medium frequency currents. Interferential currents - general biological | Interactive | 2 |

| | | |
|---|---|---|
| effects, physiological and therapeutic effects, indications and contraindications, methods of application. | interactive | |
| High-frequency currents. Continuous short waves. Pulsed short waves. - general biological effects, physiological and therapeutic effects, indications and contraindications, methods of application. | Interactive interactive | 2 |
| Ultrasound therapy - general biological effects, physiological and therapeutic effects, indications and contraindications, methods of application. | Interactive interactive | 2 |
| Ultraviolet and infrared radiation - general biological effects, physiological and therapeutic effects, indications and contraindications, methods of application. | Interactive course Interactive | 2 |
| Magnetotherapy - general biological effects, physiological and therapeutic effects, indications and contraindications, methods of application. | Interactive interactive | 2 |
| LASER - general biological effects, physiological and therapeutic effects, indications and contraindications, methods of application. | Interactive interactive | 2 |
| TECAR therapy - general biological effects, physiological and therapeutic effects, indications and contraindications, methods of application. | Interactive interactive | 2 |
| Shockwave - general biological effects, physiological and therapeutic effects, indications and contraindications, methods of application. | Interactive course interactive | 2 |

Bibliography:

1. Mihaela Zăvăleanu, Eugenia Roşulescu, Ilona Ilinca, Mirela Călina, Denisa Enescu. *Electrotherapeutic modalities of treatment*, Universitaria Publishing House, Craiova, 2007, 86p., ISBN 978-973-742-612-3
2. Popescu R., Physical Medicine, Balneoclimatology and Recovery, Ed.Medicala Universitara, Craiova, 2005.
3. Daia Cristina, Electrotherapy. Practical principles, Universitara Publishing House 2019
4. Radulescu A., Electrotherapy, Medical Publishing House, Bucharest, 2004.

| **9.2.Seminar/laboratory** | **Teaching methods** | **No. of hours** |
|---|---|---|
| Presentation of an electrotherapy cabinet; notions of occupational safety and patient protection against accidents | Explanation, demonstration | 1 |
| General presentation of electrotherapy equipment; classification of electrotherapy devices according to current frequency. | Explanation, demonstration | 1 |
| Practical methods of applying galvanic current | Explanation, demonstration | 1 |
| Practical methods of applying low-frequency currents. Diadynamic currents | Explanation, demonstration | 1 |
| Practical methods of applying TENS, TRABERT | Explanation, demonstration | 1 |
| Practical methods of applying medium frequency currents. Interferential currents | Explanation, demonstration | 1 |
| Practical methods of applying high-frequency currents. Continuous short waves. Pulsed short waves. | Explanation, demonstration | 1 |
| Practical methods of applying ultrasound | Explanation, demonstration | 1 |
| Practical methods of applying ultraviolet and infrared radiation | Explanation, demonstration | 1 |
| Practical methods of applying magnetotherapy | Explanation, demonstration | 1 |
| Practical methods of applying LASER therapy | Explanation, | 1 |

| | | |
|---|---|---|
| | demonstration | |
| Practical methods of applying TECAR therapy | Explanation, demonstration | 1 |
| Practical methods of applying Shockwave therapy | Explanation, demonstration | 1 |
| Case studies - practical methods for developing a kinetic programme for patients with rheumatic disorders | Working individually and/or in pairs, in small groups | 1 |


Bibliography:
1. Mihaela Zăvăleanu, Eugenia Roşulescu, Ilona Ilinca, Mirela Călina, Denisa Enescu. *Electrotherapeutic modalities of treatment*, Universitaria Publishing House, Craiova, 2007, 86p., ISBN 978-973-742-612-3
2. Popescu R., Physical Medicine, Balneoclimatology and Recovery, Ed.Medicala Universitara, Craiova, 2005.
3. Daia Cristina, Electrotherapy. Practical principles, Universitara Publishing House 2019
4. Radulescu A., Electrotherapy, Medical Publishing House, Bucharest, 2004.
5. Cristina Daia – Electrotherapy, Practical Principles, Editura Universitară, 2022


**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

The content of the discipline (course and practical work) aims to train future therapists in strategic management thinking and an analytical approach to patients with rheumatic conditions. Scientific knowledge of the action of electrical factors on the body. Understanding the principles of the methods and equipment used in medical practice. Acquisition of skills and competences in the use of medical equipment and critical evaluation of the results obtained.

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | Level of mastery of course content<br>In order to pass the course, the grade obtained in the written exam must be at least 5. | Written assessment | 70 |
| 11.2. Seminar/laboratory | 1 examination during the semester with topics from the topics presented in the course/laboratory<br>Preparation and presentation of a treatment plan based on a chosen topic | Practical/oral assessment | 30 |
| 11.3. Minimum performance standard | | | |
| Knowledge of the main characteristics of different electrotherapy procedures.<br>The score from the written assessment must represent the pass mark (minimum 5) regardless of the other marks obtained | | | |

Date of completion 01.09.2025 Signature of the course lecturer Associate Professor Mihaela ZĂVĂLEANU, PhD Signature of the seminar lecturer Associate Professor Mihaela ZĂVĂLEANU, PhD

Lecturer Dr. GORGAN Anamaria

Date of approval by the department
15.09.2025

Signature of the head of department
Prof. Rusu Ligia

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

# SUBJECT DESCRIPTION
# 2027

## 1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor *skills/Physiokinetotherapist - COR code 226401; Kinesitherapist - COR code 226405;* |

**2. Information about the discipline**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **Physiotherapy in neurological disorders** | | | | | | |
| 2.2 Course coordinator | Prof. Ligia Rusu | | | | | | |
| 2.3 Seminar coordinator(s) | Lecturer Dr. Ilie Eva Nicoleta<br>Assistant Lecturer Dr. Roșulescu Radu | | | | | | |
| 2.4 Year of study | 3 | 2.5 Semester | VI | 2.6 Type of assessment | E | 2.7 Discipline regime | DOB |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 4 | of which: 3.2 lectures | 2 | 3.3 seminar/laboratory | 2 |
| 3.4 Total hours in the curriculum | 56 | of which: 3.5 course | 28 | 3.6 seminar/laboratory | 28 |
| Time allocation | | | | | |
| Study using textbooks, course materials, bibliography and notes | | | | | 16 |
| Additional research in the library, on specialised electronic platforms and in the field | | | | | 14 |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | | | | | 10 |
| Tutoring | | | | | - |
| Examinations | | | | | 2 |
| Other activities consultations, student circles | | | | | 2 |

| | |
|---|---|
| 3.7 Total hours of individual study | 44 |
| 3.8 Total hours per semester | 10 |
| 3.9. Number of credits | 4 |

**4. Prerequisites** (where applicable)

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|---|---|
| 4.1 Curriculum | Knowledge of physiology, pathophysiology, assessment and recovery methods. |
| 4.2 Skills | - |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Room with technical equipment - PC, video projector, screen |
| 5.2 for conducting the seminar/laboratory | Hospital internship, physiotherapy room |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC3, CC4, CC6. |

| | |
|---|---|
| 6.2. Professional skills | CP2, CP3, CP9. |
| 6.3. Transversal skills | CT2, CT3, CT4, CT5, CT6, T7 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1.Knowledge | 1. The student/graduate explains the general notions of the field, referring to the concepts of motor skills and motor activity, the structure and functions of human motor activities, their effects on development and education, so that they can be used in the rehabilitation process.<br>2. The student/graduate defines the general, structural (anatomical) and functional concepts of the human body, with a view to developing rehabilitation programmes.<br>3. The student/graduate identifies general and age-specific behavioural aspects, pathology and population categories before, during and after intervention, in order to maximise the effects of the rehabilitation process. |
| 7.2.Skills/abilities | The student/graduate:<br>1.4. Uses fundamental concepts of human motor skills in various contexts.<br>1.5. Uses terminology according to motor activities.<br>1.6. Distinguishes the role and place of the physiotherapist in different professional contexts.<br>The student/graduate:<br>2.1. Identifies the structures and functions of the human body and methods for assessing biological functions.<br>2.2. Presents the actions of different muscle groups and movement parameters.<br>The student/graduate:<br>4.1. Explains the role of the human psyche in the rehabilitation process.<br>4.2. Demonstrates methods and techniques for influencing the subject's behaviour |
| 7.3. Responsibility and autonomy | The student/graduate:<br>1.1.2. Exemplifies acts, actions and motor activities.<br>1.2.1. Argues for the use of specialised physiotherapy terminology in debates within the field.<br>1.3.1. Identifies the duties of the physiotherapist within interdisciplinary teams Provides quality functional rehabilitation services in accordance with professional standards.<br>The student/graduate:<br>2.1.1. Integrates fundamental concepts regarding |

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|---|---|
| | the structures and functions of the human body into the rehabilitation process.<br>2.2.1. Recognises the characteristics of movement and their parameters<br>The student/graduate:<br>4.1.1. Identifies the relationship between the functioning of the mental system and the presence of pathologies.<br>4.2.1. Uses professional communication techniques before, during and after the intervention. |

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**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | Preparation and acquisition of theoretical and practical knowledge specific to neurological disorders, in line with the objectives of functional rehabilitation |
| 8.2. Specific objectives | -Knowledge of the clinical and functional aspects of neurological disorders<br>-Indications and contraindications for the application of kinesitherapy in neurological disorders<br>-Understanding the functional impact of neurological disorders, functional assessment, setting short-term and long-term recovery goals |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| 1. Introductory notions on rehabilitation in neurology | Oral presentations, presentations PowerPoint presentations, films | 2 |
| 2. Assessment in neurology | | 2 |
| 3. Recovery methods used in neurology | | 6 |
| 4. Peripheral motor neuron syndrome – clinical aspects, assessment, physiotherapy | | 4 |
| 5. Brachial plexus paralysis, clinical presentation, assessment, physiotherapy programme | | 2 |
| 6. Sciatic nerve paralysis – clinical aspects, assessment, physiotherapy programme | | 2 |
| 7. Central motor neuron syndrome – clinical aspects, assessment, physiotherapy | | 4 |
| 8. Cerebrovascular accidents – classification, clinical presentation, clinical and functional assessment, kinetic programme | | 4 |
| 9. Paraplegia – causes, clinical presentation, assessment, physiotherapy | | 2 |

Bibliography

1. Bonifer N, Anderson K, Arciniegas D.-( 2005)- Constraint-induced therapy for moderate chronic upper extremity impairment after stroke. Brain Injury.;19:323–330
2. DeLisa J.A., Saeed M.A. (1998) Rehabilitation Medicine. Principles and Practice Ed. Lippincot-Raven Publishers
3. L. Rusu, M. Vasilescu, C. Stroe. D. Ciocanescu, Rehabilitation of gait in Parkinson disease using

<table>
<tr><td colspan="3">resistance training, 4th European Sports Medicine Congress & FIMS team physicians development course, Hawaii Hotel, Lemesos – Cyprus, 11-15 October 2005<br>4. Ligia Rusu. Kinetic intervention in neuromyartrokinetic disorders, Editura Universitaria Craiova, 2007, ISBN 978-973-742-609-3<br>5. Ligia Rusu - Orthotics and Prosthetics in Kinetotherapy, Universitaria Craiova Publishing House, 2007, ISBN 978-973-742-617-8</td></tr>
<tr><td>9.2.Seminar/laboratory</td><td>Teaching methods</td><td>No. of hours</td></tr>
<tr><td>1. Assessment of the neurological patient</td><td></td><td>4</td></tr>
<tr><td>2. Recovery objectives and methods in neurological disorders (FNP techniques)</td><td></td><td>4</td></tr>
<tr><td>3. Principles of recovery in peripheral motor neuron syndrome<br><br>4. Principles of recovery in brachial plexus paralysis</td><td></td><td>4<br><br>4</td></tr>
<tr><td>5. Principles of recovery in sciatic nerve paralysis</td><td></td><td>4</td></tr>
<tr><td>6. Principles of recovery in cerebrovascular accidents</td><td></td><td>4</td></tr>
<tr><td>7. Principles of recovery in paraplegia</td><td></td><td>4</td></tr>
<tr><td colspan="3">Bibliography<br>1. Bonifer N, Anderson K, Arciniegas D.-( 2005)- Constraint-induced therapy for moderate chronic upper extremity impairment after stroke. Brain Injury.;19:323–330<br>2. DeLisaJ.A ,Saeed M.A(1998) Rehabilitation Medicine . Principles and Practice Ed. Lippincot – Raven Publishers<br>3. L. Rusu, M. Vasilescu, C. Stroe. D. Ciocanescu, Rehabilitation of gait in Parkinson disease using resistance training, 4th European Sports Medicine Congress & FIMS team physicians development course, Hawaii Hotel, Lemesos – Cyprus, 11-15 October 2005<br>4. Ligia Rusu. Kinetic intervention in neuromyartrokinetic disorders, Editura Universitaria Craiova, 2007, ISBN 978-973-742-609-3<br>5. Ligia Rusu - Orthotics and Prosthetics in Kinetotherapy, Universitaria Craiova Publishing House, 2007, ISBN 978-973-742-617-8</td></tr>
</table>

**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

| |
|---|
| Cooperation with neuromotor recovery services in hospitals and recovery centres, with the aim of improving the clinical and functional assessment of patients with neuromotor disorders, as well as monitoring recovery programmes. |

**11. Assessment**

| Type of activity | 11.1 Evaluation criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | in line with educational objectives | Written exam | 70 |
| 11.2. Seminar/laboratory | - in line with educational objectives of practical work | 81 exam Practical work – clinical case/presentation | 30% |

| 11.3. Minimum performance standard grade 5 |
|---|

Date of completion

1.09.2025 Signature of course coordinator Signature of the laboratory coordinator

Prof. Ligia Rusu, PhD Lecturer Eva Nicoleta Ilie, PhD

Assistant Professor Roșulescu Radu

Date of approval by the department
15.09.2025

Signature of the head of department
Prof. Rusu Ligia

**SUBJECT DESCRIPTION**
**2027**

**1. Programme details**

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor *skills/Physiokinetotherapist - COR code 226401; Kinesitherapist - COR code 226405;* |

**2. Information about the discipline**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **PHYSIOTHERAPY IN CARDIOVASCULAR DISEASES** | | | | | | |
| 2.2 Course coordinator | **UNIVERSITY LECTURER DR. ENESCU BIERU DENISA** | | | | | | |
| 2.3 Seminar lecturer(s) | **UNIVERSITY LECTURER DR. ENESCU BIERU DENISA**<br>**UNIVERSITY LECTURER DR. NEAMȚU OANA MARIA** | | | | | | |
| 2.4 Year of study | **III** | 2.5 Semester | **VI** | 2.6 Type of assessment | **E** | 2.7 Course requirements | **DOB** |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | **4** | of which: 3.2 lectures | **2** | 3.3 seminar/laboratory | **2** |
| 3.4 Total hours in the curriculum | **56** | of which: 3.5 course | **28** | 3.6 seminar/laboratory | **28** |

| Distribution of time | hours |
|---|---|
| Study using textbooks, course materials, bibliography and notes | **14** |
| Additional documentation in the library, on specialised electronic platforms and in the field | **12** |
| Preparation of seminars/laboratories, assignments, reports, portfolios and essays | **6** |
| Tutoring | **-** |
| Examinations | **6** |
| Other activities | **6** |

| | |
|---|---|
| 3.7 Total hours of individual study | **44** |
| 3.8 Total hours per semester | **10** |
| 3.9. Number of credits | **4** |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | General notions of Anatomy, Physiology, Semiology, Physiopathology. |
| 4.2 Skills | Not applicable. |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Lecture hall with a minimum of 90 seats, equipped with a laptop, projection screen and video projector |
| 5.2 for conducting the seminar/laboratory | Laboratory room with a minimum of 30 seats, equipped with a laptop, projection screen, video projector and kinetic recovery room, equipped with specialised equipment. |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC3, CC4 |
| 6.2. Professional skills | CP3, CP5, CP10, CP12, CP14, CP19, CP26, CP30, CP31, CP34, CP37, CP38, CP39, CP55, CP57 |
| 6.3. Transversal competences | CT1, CT2, CT3, CT6, CT7, CT9, CT10, CT12, CT16, CT18 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | The student defines the general, structural and functional concepts of the human body, with a view to developing kinetic rehabilitation and physical therapy programmes for people diagnosed with cardiovascular diseases. |
| 7.2. Skills | Students identify the structures and functions of the human body and methods for assessing biological functions. |
| 7.3. Responsibility and autonomy | Students integrate fundamental concepts regarding the structures and functions of the human body in the process of kinetic rehabilitation, and also recognise the characteristics of movement and their parameters necessary for the implementation of kinetic recovery and electrotherapy protocols for people with cardiovascular pathology. |

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | - To provide students with basic knowledge of cardiovascular pathology and ensure that they acquire this knowledge by students.<br>- Theoretical and practical knowledge of the physiokinesitherapy protocols used ly in the recovery of cardiovascular diseases.<br>- Presentation of the main cardiovascular diseases from a unified point of view, based the basis of physiopathological interrelationships, thus establishing a foundation for the establishment of specific physiokinesitherapy. |
| 8.2. Specific objectives | - Recognition of specific physiokinesitherapeutic indications and contraindications for each cardiovascular condition (essential hypertension, acute myocardial infarction, valvular heart disease, etc.).<br>- Correct application of the kinetic exercise programme in relation to the age, sex, |

| | |
|---|---|
| | physical condition, and exercise capacity of the respective patient.<br>- Correctly learning the cardiovascular recovery methodology specific t ly to each<br>type of cardiovascular patient, adapted to their health status. |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| 1. Anatomy of the cardiovascular system | Presentation of courses in PPT format, with active student participation | **2** |
| 2. Physiology of the cardiovascular system | | **2** |
| 3. Recovery of cardiovascular patients | | **2** |
| 4. Cardiovascular functional tests | | **2** |
| 5. Testing cardiac exercise capacity | | **2** |
| 6. Essential hypertension | | **2** |
| 7. Ischemic heart disease | | **2** |
| 8. Acute myocardial infarction | | **2** |
| 9. Cardiac arrhythmias | | **2** |
| 10. Valvular heart disease | | **2** |
| 11. Peripheral artery disease | | **2** |
| 12. Venous diseases | | **2** |
| 13. Cardiovascular functional disorders | | **2** |
| 14. Review course | | **2** |

Bibliography

1. Avramescu, E.T., Rusu, L., *Human Anatomy*, Ed. Universitaria, Craiova, 2006
2. Dobreci, D. L, *Kinetotherapy in cardiovascular diseases*, Alma Mater Publishing House, Bacău, 2009
3. Enescu Bieru, D., *The Importance of Kinetics Recovery Programmes in Cardiovascular Pathology*, Universitaria Craiova Publishing House, Prouniversitaria Bucharest, 2014
4. Denisa Enescu Bieru, Alice Diana Gusti, Oana Neamțu, Mircea Dănoiu, *General Physiology*, Universitaria Craiova Publishing House, 2020, 211 pages, ISBN 978-606-14-1603-5
5. Hagiu, B.A., *Kinetotherapy in cardiovascular* diseases, "Al. I Cuza" Publishing House, Iași, 2014.

| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
|---|---|---|
| 1. Kinetotherapy in functional disorders<br>Presentation of theoretical concepts of kinetic recovery programmes and exercises, practical demonstrations of these, individually or in groups of students, as well as specific physical procedures | Presentation of theoretical concepts of kinesiotherapy recovery programmes and exercises, practical demonstrations of these, individually or in groups of students, as well as specific physical procedures | **2** |
| 2. Kinetotherapy in essential arterial hypertension<br>essential arterial hypertension | | **2** |
| 3. Kinetotherapy in myocardial infarction acute | | **6** |
| 4. Kinetotherapy in cardiac arrhythmias | | **6** |
| 5. Kinetotherapy in valvular heart disease | | **6** |
| 6. Kinetotherapy in peripheral artery disease<br>diseases | | **2** |
| 7. Kinetotherapy in venous diseases | | **2** |
| 8. Summary | | **2** |

Bibliography:
1. Enescu Bieru, D., *The importance of kinetic recovery programmes in cardiovascular pathology*, Universitaria Craiova Publishing House, Prouniversitaria Bucharest, 2014
2. Ionescu, A., *Medical gymnastics*, Ed. All, Bucharest, 1994
3. Marza, D., *Kinetotherapy in cardiovascular disorders*, Practical workbook, University of Bacău, 1996
4. Obraşcu, C., *Physical exercise for cardiovascular patients*, Ed. Medicală, Bucharest, 1989

**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

The proposed courses and practical work cover current topics in the field of cardiovascular physiokinesitherapy, requiring a unified approach to cardiovascular pathology in order to establish a complex, prophylactic and curative physical and kinetic treatment. The concepts taught are constantly updated with the latest literature, with an emphasis on the possibilities of treating patients with cardiovascular pathology through physical procedures and movement in an effective, individualised manner and without significant side effects.

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | Knowledge and correct presentation of the theoretical concepts characteristic of the discipline, through active participation in the courses taught during the semester | Oral or written multiple-choice exam | 60 |
| 11.2. Seminar/laboratory | Theoretical acquisition and descriptive presentation of kinetic exercise programmes and physical procedures recommended for the recovery of cardiovascular patients, through active participation in practical work carried out during the semester | Practical test<br>Case study presenting kinetic recovery protocols and physical procedures recommended for the treatment of various cardiovascular conditions | 40% |
| 11.3. Minimum performance standard | | | |
| Minimum knowledge required to pass the course:<br>- acquisition of the main concepts of anatomy and physiology of the cardiovascular system<br>- understanding the basic concepts of the main cardiovascular diseases<br>- general knowledge of physical methods and kinetic recovery programmes for cardiovascular patients<br>.<br>Method of assessing the minimum knowledge required:<br>- obtaining a grade of 5, both in the oral or written exam and in the presentation of case studies<br>- the final passing grade is the average of the grades obtained in the oral/written exam, the theoretical test | | | |

| |
|---|
| and the practical test<br>, by applying the above-mentioned weighting. |

Date of completion: 01.09.2025

Course coordinator's signature
Associate Professor Dr. ENESCU BIERU DENISA

Seminar coordinator's signature
Associate Professor Dr. ENESCU BIERU DENISA

Assoc. Prof. Dr. NEAMȚU OANA MARIA

Date of approval by the department
15.09.2025

Signature of the head of department
Prof. RUSU LIGIA

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

**SUBJECT DESCRIPTION**
**2027**

**1. Programme details**

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor *skills/Physiokinetotherapist - COR code 226401; Kinetotherapist - COR code 226405;* |

**2. Information about the discipline**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **Physiotherapy in rheumatic diseases** | | | | | | |
| 2.2 Course coordinator | **Assoc. Prof. Mihaela ZĂVĂLEANU** | | | | | | |
| 2.3 Seminar lecturer(s) | **Associate Professor Mihaela ZĂVĂLEANU**<br>**Assistant Professor Cătălin POPA** | | | | | | |
| 2.4 Year of study | III | 2.5 Semester | VI | 2.6 Type of assessment | E | 2.7 Course requirements | DOB |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 3 | of which: 3.2 lectures | 2 | 3.3 seminar/laboratory | 1 |
| 3.4 Total hours in the curriculum | 42 | of which: 3.5 course | 28 | 3.6 seminar/laboratory | 14 |
| Distribution of time | | | | | hours |
| Study using textbooks, course materials, bibliography and notes | | | | | 10 |

| | |
|---|---|
| Additional documentation in the library, on specialised electronic platforms and in the field | 10 |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | 10 |
| Tutoring | 0 |
| Examinations | 3 |
| Other activities: consultations | - |

| | |
|---|---|
| 3.7 Total hours of individual study | 33 |
| 3.8 Total hours per semester | 75 |
| 3.9. Number of credits | 3 |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Anatomy, Semiology, General Principles of Physiotherapy, Radiology and Medical Imaging, Kinetoprophylaxis, Physiotherapy in Orthopaedic and Traumatic Conditions, |
| 4.2 Skills | Not applicable |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Room with technical equipment, computer, video projector |
| 5.2 for conducting the seminar/laboratory | Room/office equipped with specific equipment and instruments, computer, video projector |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC4, CC5, CC7 |
| 6.2. Professional skills | CP1, CP2, CP3, CP4, CP9, CP12, CP19, CP22, CP24, CP26, CP30, CP33, CP34 |
| 6.3. Transversal competences | CT5, CT6, CT7, CT8, CT9, CT10, CT11, CT 13 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | - The student/graduate identifies general and age-specific behavioural aspects, pathology and population categories before, during and after intervention, in order to maximise the effects of the rehabilitation process for rheumatic conditions |
| 7.2. Skills/ Skills | - The student/graduate:<br>4.1.Explains the role of the human psychic system in the rehabilitation process for rheumatic diseases<br>4.2.Demonstrate methods and techniques for influencing the behaviour of subjects with rheumatic diseases |
| 7.3.Responsibility and autonomy | -Student/graduate<br>4.1.1. Identifies the relationship between the functioning of the psychic system and the presence of rheumatic pathologies<br>4.2.1. Uses professional communication techniques before, during and after intervention |

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | - Functional clinical assessment of patients with rheumatic diseases<br>- Physiotherapy management in rheumatic diseases, with an emphasis on |

| | |
|---|---|
| | presenting and illustrating all related treatment methods and means for prophylactic, therapeutic and recovery purposes, depending on the stage of development of the rheumatic disease. |
| 8.2. Specific objectives | - Acquisition of the specialist terminology necessary to study the relevant materials and to practise in the field of rheumatic diseases<br>- To gain a thorough understanding of the etiopathogenic mechanisms underlying rheumatic diseases<br>- Application of specific assessments to patients with rheumatic diseases<br>- Developing and managing physiotherapy programmes in a professional context, in accordance with ethical and professional standards.<br>- Developing the practical skills necessary to select and apply specific techniques, means and methods for managing patients with rheumatic diseases |

**9. Content**

| **9.1. Course** | **Teaching methods** | **No. of hours** |
|---|---|---|
| Introduction to rheumatic pathology. Clinical examination of rheumatic patients. Etiopathogenesis, imaging investigations, diagnostic criteria. Recovery objectives and methodology used in the recovery of rheumatic diseases. Medical recovery methodologies used in rheumatic diseases. | Course Interactive | 4 |
| Rheumatoid arthritis clinical aspects, functional assessment, differential diagnosis, recovery objectives, recovery methods according to the stage of the disease | Interactive interactive | 4 |
| Ankylosing spondylitis clinical aspects, functional assessment, differential diagnosis, recovery objectives, recovery methods according to the stage of the condition | Course Interactive | 2 |
| Rheumatic disorders of the shoulder. Scapulohumeral periarthritis: clinical aspects, functional assessment, differential diagnosis, recovery objectives, recovery methods | Course interactive | 2 |
| Coxarthrosis, gonarthrosis, ankle arthrosis: clinical aspects, functional assessment, differential diagnosis, recovery objectives, recovery methods | Course interactive | 4 |
| Degenerative pathology of the cervical-dorsal-lumbar spine: clinical aspects, functional assessment, differential diagnosis, recovery objectives, recovery methods | Course interactive | 4 |
| Osteoporosis: clinical aspects, functional assessment, differential diagnosis, recovery goals, recovery methods | Course Interactive | 2 |
| Fibromyalgia: clinical aspects, functional assessment, differential diagnosis, recovery objectives, recovery methods | Course interactive | 2 |
| Gout: clinical aspects, functional assessment, differential diagnosis, recovery objectives, recovery methods | Course interactive | 1 |
| Systemic lupus erythematosus: clinical aspects, functional assessment, recovery objectives, recovery methods | Interactive interactive | 1 |
| Psoriatic arthritis, polymyositis, dermatomyositis: clinical aspects, functional assessment, differential diagnosis, recovery objectives, recovery methods | Course interactive | 2 |

Bibliography

1. Roşulescu, E. (2009). Kinetotherapy in the recovery of rheumatic diseases. Universitaria.
2. Handa, R. (2021). Clinical rheumatology. Singapore: Springer.
3. Kolasinski, S. L., Neogi, T., Hochberg, M. C., ……. Reston, J. (2020). 2019 American College of Rheumatology/Arthritis Foundation Guideline for the Management of Osteoarthritis of the Hand, Hip, and Knee. Arthritis care & research, 72(2), 149–162. https://doi.org/10.1002/acr.24131

4. Imboden J.B.; Hellmann D. B.; Stone J. A. (2021) Current Diagnosis & Treatment in Rheumatology 4th edition McGraw-Hill Education Print ISBN: 9781259644641
5. Sbenghe T. Medical recovery at home, Ed Medicală, Bucharest 1996

| **9.2.Seminar/laboratory** | **Teaching methods** | **No. of hours** |
|---|---|---|
| Practical aspects of assessing rheumatic patients with the selection of therapeutic objectives and methods. | Explanation, demonstration | 2 |
| Practical methods for developing a kinetic programme for patients with chronic inflammatory rheumatism. | Explanation, demonstration | 2 |
| Practical methods for developing a kinetic programme for patients with coxarthrosis/gonarthrosis/ankle problems | Explanation, demonstration | 2 |
| Practical methods for developing a kinetic programme for patients with degenerative spinal disorders | Explanation, demonstration | 2 |
| Practical methods for developing a kinetic programme for patients with osteoporosis/fibromyalgia | Explanation, demonstration | 2 |
| Practical methods for developing a kinetic programme for patients with<br>Rheumatoid arthritis | Explanation, demonstration | 2 |
| Case studies - practical methods for developing a kinetic programme for patients with rheumatological pathology, | Individual and/or pair work, in small groups | 2 |

Bibliography

1.Roşulescu E., Rusu L., Stanomirescu A-M. (2004) Practical notions of kinesitherapy in the recovery of musculoskeletal injuries, Practical workbook, Craiova University Press
2. Sbenghe T. - Prophylactic, therapeutic and recovery kinesitherapy, Medical Publishing House, Bucharest, 1987
3. Sbenghe T. Medical recovery at home, Medical Publishing House, Bucharest 1996
4. Albu, C., Armbrüster, T. L., & Albu, M. (2012). *Kinetotherapy: methodology for positioning and mobilising patients*. Polirom.
5. Cosma Marian Alexandru, Zăvăleanu Mihaela, Stoica Doru, Forțan Cătălin, Chapter 7 of "Innovative cross-sectoral training kit for professionals working with older people (caregivers and physical trainers)" (online edition, pdf, 2024), ISBN code 978-973-0-40259-9. https://elders.vtserver.eu/local/staticpage/view.php?page=result
6. Cosma Germina-Alina, Zăvăleanu Mihaela Chapter 8 of Innovative cross-sectoral training kit for professionals working with elders (caregivers and physical instructors) ISBN 978-973-0-40259-9 ISBN 978-973-0-40263-6 (online edition, pdf, 2024), collective authorship, Universitaria Craiova Publishing House.
7. Mihaela Zăvăleanu, Elena Taina Avramescu, Semiology practical works, Universitaria Craiova Publishing House, 2005, ISBN 973-742-203-1, 70 pages
8. Kiss, I. (2002) Physiokinesitherapy and Medical Recovery. Bucharest: Medical Publishing House

**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

The course content (lectures and practical work) aims to develop strategic management thinking and an analytical approach to patients with rheumatic conditions in future therapists. The course content specifically aims to develop the skills needed to apply the means, techniques, procedures and methods learned for complex intervention and treatment of patients with rheumatic diseases.

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | Level of mastery of course content<br>In order to pass the course, the grade obtained in the written exam must be at least 5. | Written assessment | 70 |
| 11.2. Seminar/laboratory | 3 examinations during the semester with topics related to rheumatic pathologies of the upper and lower limb joints and the spine.<br>Attendance at practical work and lectures is a prerequisite for sitting the examination. | Practical/oral assessment | 30 |
| 11.3. Minimum performance standard | | | |
| Knowledge of the main characteristics of rheumatic diseases.<br>Knowledge and application of kinetic means and methods in rheumatological practice. | | | |

Date of completion 01.09.2025

Signature of course lecturer Associate Professor Mihaela ZĂVĂLEANU, PhD

Signature of the seminar lecturer Associate Professor Mihaela ZĂVĂLEANU, PhD

Assistant Prof. Cătălin POPA

Date of approval by the department 15.09.2025

Signature of the head of department Prof. Rusu Ligia

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

# COURSE DESCRIPTION
**2027**

## 1. PROGRAMME INFORMATION

| | |
|---|---|
| 1.1 Higher education institution | **University of Craiova** |
| 1.2 Faculty/department | **Faculty of Physical Education and Sport/Department 6** |
| 1.3 Department | **Kinesiotherapy and Sports Medicine** |
| 1.4 Field of study | **Sports Science and Physical Education** |
| 1.5 Cycle of studies[1] | **Bachelor's degree - cycle 1** |
| 1.6 Study programme (name/code)[2] /Qualification | **Kinetotherapy and special motor skills/Physiokinetotherapist - COR code 226401;**<br>**Kinetotherapist - COR code 226405;** |

## 2. INFORMATION ABOUT THE DISCIPLINE

| | |
|---|---|
| 2.1 Name of the discipline | **PHYSICAL ACTIVITY ADAPTED TO PEOPLE WITH DISABILITIES** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.2 Course coordinator | | | | **Associate Professor Ilinca Ilona** | | | |
| 2.3 Seminar coordinator | | | | **Associate Professor Ilinca Ilona** | | | |
| 2.4 Year of study | **3** | 2.5 Semester | **VI** | 2.6 Type of assessment | **E** | 2.7 Course requirements (compulsory) | **DOB** |

**3. TOTAL ESTIMATED TIME** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | **3** | of which: 3.2 lectures | **2** | 3.3 seminar/laboratory/project | **1** |
| 3.4 Total hours in the curriculum | **42** | of which: 3.5 course | **28** | 3.6 seminar/laboratory/project | **14** |
| 3.7 Distribution of time | | | | | hours |
| ▪ Study using textbooks, course materials, bibliography and notes | | | | | 3 |
| ▪ Additional documentation in the library, on specialised electronic platforms and in the field | | | | | 2 |
| ▪ Preparation for seminars/laboratories, assignments, reports, portfolios and essays | | | | | 3 |
| ▪ Tutoring | | | | | - |
| ▪ Examinations | | | | | - |
| ▪ Other activities: consultations, student clubs | | | | | - |

| | |
|---|---|
| **Total hours of individual activities** | **8** |
| 3.8 Total hours per semester | **50** |
| 3.9 Number of credits | **2** |

**4. PREREQUISITES** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Completion of the following subjects: Anatomy, General Principles of Kinetotherapy, Semiology, Measurement and Assessment in Kinetotherapy, Kinesiology |
| 4.2 Skills | Performing physiotherapy-specific assessments, applying specific techniques |

**5. CONDITIONS** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Room equipped with projector, laptop/computer, internet access and online platforms, electronic materials (ppt, .doc, .pdf, video, films, images) |
| 5.2. for conducting the seminar/laboratory/project | Physiotherapy room equipped with the necessary equipment and facilities for practical work |

**6. SKILLS**

| | |
|---|---|
| 6.1. Key competences | CC2, CC4 |
| 6.2. Professional competences | CP3, CP9, CP10, CP12, CP15 |
| 6.3. Transversal competences | CT1, CT2, CT9, CT16, CT18 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | - Students define the general, structural (anatomical) and functional concepts of the human body, with a view to developing rehabilitation programmes. |
| 7.2.Skills/abilities | - The student identifies the structures and functions of the human body and methods for assessing biological functions.<br>- Students present the actions of different muscle groups and movement parameters. |
| 7.3. Responsibility and autonomy | - Students integrate fundamental concepts regarding the structures and functions of the human body into the rehabilitation process.<br>- Students recognise the characteristics of movement and their parameters. |

**8. COURSE OBJECTIVES** (based on the competency grid)

| | |
|---|---|
| 7.1 General objective of the | - Students' acquisition of theoretical and practical knowledge |

| | |
|---|---|
| discipline | |
| 7.2 Specific objectives | - To learn about the physical and psychological characteristics of people with disabilities and the differences caused by a particular type of disability.<br>- Understanding the possibilities of recovery through adapted physical activities and their effects on specific disabilities.<br>- Knowledge of rehabilitation methods for harnessing existing human potential with a view to the socio-professional integration of people with special needs. |

**9. CONTENT**

| **9.1. Course** | Teaching methods | No. of hours |
|---|---|---|
| - Types of special needs: general information, definitions, classification, aetiology | Presentation of theoretical concepts using PowerPoint<br><br>Interactive courses based on debates on course notes or previously acquired knowledge | 2 |
| - Particularities and characteristics of persons with disabilities by age group | | 2 |
| - Visual and hearing disabilities - categories of impairments, aetiology, particularities of the recovery process, adapted activities | | 4 |
| - Locomotor disabilities – definition, classification, aetiology, particularities of the recovery process, adapted activities | | 8 |
| - Intellectual disabilities – definition, classification, aetiology, particularities of the recovery process, adapted activities | | 4 |
| - Neuromuscular diseases: definitions, classification, assessment, particularities of the recovery process, adapted activities | | 4 |
| - Integration of persons with disabilities, occupational therapy, adapted sports | | 2 |
| - Mobility aids, devices, assistive technologies for persons with disabilities. | | 2 |

Bibliography

1. Ilinca. I. Adapted sports for persons with disabilities, Ed. Universitaria, 2009.

2. Teodorescu S. – Physical activities adapted for people with sensory, mental and social disabilities, 2007

3. Bota A. – Sports adapted for people with motor impairments, 2007.

4. Ciobanu, D., Dan, M., Sports activities adapted for people with disabilities, 2007.

5. Roşulescu, E., Ilinca, I., Kinetotherapy in paediatric conditions, Ed. Universitaria, Craiova, 2007.

6. Ligia Rusu – Orthotics and prosthetics in kinesitherapy, Editura Univesritaria Craiova, 2007.

| **9.2.Seminar/laboratory** | Teaching methods | No. of hours |
|---|---|---|
| Recovery strategies for people with visual and hearing impairments | | 4 |

| | | |
|---|---|---|
| Features of physiotherapy intervention in people with intellectual disabilities | Lecture + debate + studies - Presentations of Case + Demonstration | 2 |
| Particularities of physiotherapy intervention in people with locomotor disabiliti | | 4 |
| Physiotherapy intervention strategies for people with neuromuscular diseases | | 2 |
| Orthotics for persons with disabilities: types of orthoses | | 2 |

Bibliography:


1. Teodorescu S. – Adapted physical activities for people with sensory, mental and social disabilities, 2007

3. Bota A. – Adapted sports for people with motor impairments, 2007.

4. Ciobanu, D., Dan, M., Adapted sports activities for persons with disabilities, 2007.

5. Roşulescu, E., Ilinca, I., Kinetotherapy in paediatric conditions, Ed. Universitaria, Craiova, 2007.

6. Ligia Rusu – Orthotics and prosthetics in kinesitherapy, Editura Univesritaria Craiova, 2007


## 10. CORRELATION OF THE CONTENT OF THE DISCIPLINE WITH THE EXPECTATIONS OF REPRESENTATIVES OF THE EPISTEMIC COMMUNITY, PROFESSIONAL ASSOCIATIONS AND REPRESENTATIVE EMPLOYERS IN THE FIELD RELATED TO THE PROGRAMME

The content corresponds to the needs of the labour market and the requirements of the scientific community.

## 11. EVALUATION

| Type of activity | 11.1 Evaluation criteria | 11.2 Evaluation methods | 11.3 Weighting in the final mark |
|---|---|---|---|
| 11.1 Course | Level of active participation in classes<br>Level of mastery of course content | Written exam consisting of a multiple-choice test | 70 |
| 11.2 Practical activities | Degree of active participation in practical | Assessment of methods for structuring and implementing a programme | 30 |

| | | | |
|---|---|---|---|
| | activities | of adapted physical activities | |

11.3 Minimum performance standard

- At least 2 interventions during interactive classes
- Obtaining a grade of 5 in the written exam assessing theoretical knowledge
- Demonstrating willingness to develop and implement a programme of physical activities adapted to people with disabilities
- Achieving a grade of 5 in the assessment of applied activities

| Date of completion | Signature of course instructor | Signature of the seminar holder |
|---|---|---|
| 01.09.2025 | Associate Professor Ilinca Ilona | Associate Professor Ilinca Ilona |

| Date of approval by the department | Signature of the head of department |
|---|---|
| 15.09.2025 | Prof. Rusu Ligia |

**Physiotherapy in oncological conditions UNIVERSITY OF CRAIOVA-FEFS DEPARTMENT - KINETOTHERAPY AND SPORTS MEDICINE (D06)**

**SUBJECT DESCRIPTION**
**2027-2028**

**1. Programme details**

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor *skills/Physiokinetotherapist - COR code 226401; Kinesitherapist - COR code 226405;* |

**2. Information about the discipline**

| | |
|---|---|
| 2.1 Name of the discipline | **Physiotherapy in oncological conditions** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.2 Course coordinator | | | Prof. RUSU LIGIA | | | | |
| 2.3 Seminar lecturer(s) | | | Assistant Professor PIELE DENISA | | | | |
| 2.4 Year of study | 3 | 2.5 Semester | VI | 2.6 Type of assessment | E | 2.7 Course requirements | DOB |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 2 | of which: 3.2 lectures | 1 | 3.3 seminar/laboratory | 1 |
| 3.4 Total hours in the curriculum | 28 | of which: 3.5 course | 14 | 3.6 seminar/laboratory | 14 |

| Distribution of time | hours |
|---|---|
| Study using textbooks, course materials, bibliography and notes | 9 |
| Additional documentation in the library, on specialised electronic platforms and in the field | 6 |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | 5 |
| Tutoring | - |
| Examinations | 2 |
| Other activities | - |

| | |
|---|---|
| 3.7 Total hours of individual study | 22 |
| 3.8 Total hours per semester | 50 |
| 3.9. Number of credits | 2 |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Notions of anatomy and physiology |
| 4.2 Skills | Not applicable |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Classroom with technical equipment - PC, video projector, screen |
| 5.2 for conducting the seminar/laboratory | Sf Nectarie Recovery Centre - room for practical activities equipped with PC, video projector, computer and specific equipment: devices and objects used in the assessment of cancer patients and for practical applications |

**6. Skills**

| | |
|---|---|
| 6.1. Key competences | CC1, CC3 |
| 6.2. Professional competences | CP3, CP5, CP6, CP8, CP9, CP10, CP17 |
| 6.3. Transversal | CT2, CT6, CT9, CT10, CT11, CT12 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | -- The student/graduate defines the general, structural (anatomical) and functional concepts of the human body, with a view to developing rehabilitation programmes |

| | |
|---|---|
| | - The student/graduate defines the general concepts and describes the biochemical and pathophysiological mechanisms of diseases, the anatomical and pathological bases of changes induced by pathology, with a view to implementing rehabilitation programmes; |
| 7.2.Skills/abilities | -1.1. Uses the fundamental concepts of human motor skills in various contexts. 1.2. Uses terminology according to motor activities.<br>1.3. Distinguish the role and place of the physiotherapist in different professional contexts.<br>2.1. Identify the structures and functions of the human body and methods for assessing biological functions.<br>2.2. Describe the actions of different muscle groups and movement parameters.<br>3.2. Characterise biochemical changes according to health status and level of physical exertion.<br>4.1.Explain the role of the human psyche in the rehabilitation process. |
| 7.3. Responsibility and autonomy | 1.1.1. Give examples of motor acts, actions and activities.<br>1.2.1. Argues for the use of specialised terminology in debates in the field.<br>1.3.1. Identifies the duties of the physiotherapist within interdisciplinary teams.<br>2.1.1. Integrate fundamental concepts regarding the structures and functions of the human body into the rehabilitation process.<br>2.2.1. Recognises the characteristics of movement and their parameters.<br>3.1.1. Recognises changes induced by pathology and their causes.<br>3.2.1. Establishes the parameters of physical effort according to the intervention objectives.<br>5.1.1. Complies with legal and professional standards in relation to beneficiaries. |

.

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1.General objective of the discipline | To develop the theoretical and practical skills necessary for the assessment, planning and implementation of physiotherapy programmes tailored to cancer patients, with a view to improving affected functions, quality of life and socio-professional reintegration, within a multidisciplinary approach. |
| 8.2. Specific objectives | At the end of the course, students will be able to:<br>1. **Explain** the pathophysiological characteristics of oncological conditions and the effects of treatments on the musculoskeletal system |

| | |
|---|---|
| | and vital functions.<br>2. **Perform** a functional assessment of cancer patients and **identify** the indications and contraindications for physiotherapy.<br>3. **Develop and apply** personalised recovery programmes through exercises and physiotherapy techniques adapted to the type of cancer and stage of development.<br>4. **Collaborate** effectively in a multidisciplinary team and demonstrate responsibility, empathy and respect when working with oncology patients. |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| 1. Introduction to oncology and the role of physiotherapy in cancer | Interactive lecture | 1 |
| 2. General principles of oncological recovery | Interactive lecture | 1 |
| 3. Effects of oncological treatments (surgery, chemotherapy, radiotherapy, etc.) on the body | Interactive lecture | 1 |
| 4. Functional assessment of cancer patients | Interactive lecture | 2 |
| 5. Physiotherapy in breast cancer – mastectomy and lymphoedema | Interactive lecture | 1 |
| 6. Physiotherapy in respiratory tract neoplasms | Interactive lecture | 1 |
| 7. Physiotherapy in digestive system neoplasms | Interactive lecture | 1 |
| 8. Physiotherapy in genitourinary neoplasms | Interactive lecture | 1 |
| 9. Physiotherapy in oncological pathology of the haematopoietic system (leukaemia, lymphoma, myeloma) | Interactive lecture | 1 |
| 10. Oncological pain and its management through physiotherapy | Interactive lecture | 1 |
| 11. Physical exercise in recurrence prevention and cancer survival | Interactive lecture | 1 |
| 12. Psychosocial and ethical aspects in cancer recovery | Interactive lecture | 1 |
| 13. Socio-professional reintegration and quality of life of cancer patients | Interactive lecture | 1 |

Bibliography

1.Tache GO. *Physiotherapy – Course support*. Bucharest: Carol Davila University of Medicine and Pharmacy; 2005.

**2.** Miron L, Bild E, Miron IC, Curescu Ș. *Elements of nursing in cancer*. Iași: Grigore T. Popa University Press; 2006.

**3.** Ciortea V. *Physiotherapy in oncological conditions*. Cluj-Napoca: Iuliu Hațieganu University of Medicine and Pharmacy; 2010.

4. Stubblefield MD, Keole N. *Cancer Rehabilitation: Principles and Practice.* 2nd Edition, Demos Medical, 2018.

5. Campbell KL, Winters-Stone KM, Wiskemann J. *Exercise Guidelines for Cancer Survivors.*

Springer, 2019.
6. Silver JK, Baima J. *Cancer Prehabilitation and Survivorship: A Multidisciplinary Approach.* Springer, 2013.
7.Schmitz KH (ed.). *Exercise Oncology: Prescribing Physical Activity Before and After a Cancer Diagnosis.* Springer, 2020.
8. Hansen H, Baldwin J. *Exercise Therapy in Cancer.* Routledge, 2020.
9. Abeloff MD, Armitage JO, Niederhuber JE, Kastan MB, McKenna WG. *Clinical Oncology*. 6th Edition, Elsevier, 2020.
10. DeVita VT, Lawrence TS, Rosenberg SA. *Cancer: Principles & Practice of Oncology*. 11th Edition, Wolters Kluwer, 2019.
11. Dittus KL, Lakoski SG. *Physical Activity and Cancer.* Springer, 2016.
12. Caraceni A, Shkodra M. *Cancer Pain Assessment and Management.* Springer, 2019.
13. World Health Organisation. *Cancer Control: Knowledge Into Action – WHO Guide for Effective Programmes.* WHO Press.
14. European Society for Medical Oncology (ESMO). *Clinical Practice Guidelines* – https://www.esmo.org/guidelines

| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
|---|---|---|
| 1. Anamnesis and functional assessment techniques in cancer patients | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 2 |
| 2. Measurements and assessment scales specific to oncological pathology | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of the of practical applications | 1 |
| 3.Dosing physical exercise according to the status of the cancer patient's treatment (in treatment/post-surgical/post-treatment) | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 2 |
| 4. Exercise programmes adapted for post-mastectomy | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 5. Exercise programmes adapted to patients with bronchopulmonary neoplasms | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 6. Exercise programmes tailored to patients with digestive neoplasms | Explanation<br>Demonstration | 1 |

| | | |
|---|---|---|
| | Practice<br>Practical applications<br>Methodical presentation of practical applications | |
| 7. Exercise programmes adapted to patients with genitourinary neoplasms | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 8. Physiotherapy interventions for the management of cancer pain | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 9. Development of an individualised recovery plan (case study) | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 10. Presentation and analysis of complex case studies (knowledge integration) | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 3 |

Bibliography:


1.Hansen H, Baldwin J. *Exercise Therapy in Cancer*. Routledge, 2020.

2 Torres Lacomba M, Mayoral del Moral O. *Lymphedema Management: A Comprehensive Guide for Practitioners.* Springer, 2014.

3.Caraceni A, Shkodra M. *Cancer Pain Assessment and Management.* Springer, 2019.

4. Lupu E. *Kinetotherapy in Special Conditions.* Medical Publishing House, Bucharest.

5.Silver JK, Baima J. *Cancer Prehabilitation and Survivorship: A Multidisciplinary Approach.* Springer, 2013.

6. Dittus KL, Lakoski SG. *Physical Activity and Cancer*. Springer, 2016.

7.Schmitz KH (ed.). *Exercise Oncology: Prescribing Physical Activity Before and After a Cancer Diagnosis.* Springer, 2020.

8. Ridner SH, Dietrich MS. *Assessment and Management of Lymphedema in Breast Cancer Survivors.* Springer, 2019.

9.Holland JC, Breitbart WS, Jacobsen PB, Lederberg MS, Loscalzo MJ, McCorkle R. *Psycho-Oncology.* 3rd Edition, Oxford University Press, 2015.

10.Wiener L, Pao M, Kazak AE, Kupst MJ, Patenaude AF, Arceci RJ. *Paediatric Psycho-Oncology.* Oxford University Press, 2015.


**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

The content of *the Physiotherapy in Oncology* course is aligned with international and national scientific recommendations (ESMO, ACSM, WHO), the guidelines of professional physiotherapy associations (World Physiotherapy, SRK, Romanian College of Physiotherapists) and the practical requirements of employers in rehabilitation centres and oncology clinics. The discipline ensures the development of the skills necessary for the assessment and application of physiotherapy programmes adapted to oncology patients, complying with current quality standards and promoting the integration of physiotherapists into multidisciplinary teams.

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | Acquisition, knowledge, presentation and correct explanation of concepts and notions specific to pathology. | Theoretical assessment | 50 |
| | | | |
| 11.2. Seminar/laboratory | Practical assessment – practical demonstrations related to the assessment of oncology patients and the selection, dosage and adaptation of techniques according to the patient's status. Methodical presentation of the manoeuvres applied. | Practical assessment | 50 |
| | | | |
| 11.3. Minimum performance standard | | | |
| **The score on the written/oral assessment must be a passing grade (minimum 5).**<br>**The final score will be calculated by adding the results of the written/oral assessment and the practical assessment, and the minimum passing grade is 5.** | | | |

| Date completed | Signature of course coordinator coordinator | Signature of the seminar |
|---|---|---|
| 01.09.2025 | Prof. Ligia Rusu, PhD | Assistant Professor Denisa Piele, PhD |

| Date of approval by the department | Signature of the head of department |
|---|---|
| 15.09.2025 | Prof. Ligia Rusu |

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

**SUBJECT DESCRIPTION**
**2027-2028**

**1. Programme details**

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor skills / *Physiokinetotherapist - COR code 226401;* |

| | |
|---|---|
| | *Kinesitherapist - COR code 226405;* |

**2. Information about the discipline**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **BALNEOCLIMATOLOGY** | | | | | | |
| 2.2 Course coordinator | Associate Professor Eugenia Roșulescu, PhD | | | | | | |
| 2.3 Seminar lecturer(s) | Associate Professor Eugenia Roșulescu, Associate Professor Mihaela Zăvăleanu | | | | | | |
| 2.4 Year of study | **III** | 2.5 Semester | **VI** | 2.6 Type of assessment | **C** | 2.7 Course requirements | **DOP** |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | **2** | of which: 3.2 lectures | **1** | 3.3 seminar/laboratory | **1** |
| 3.4 Total hours in the curriculum | **28** | of which: 3.5 course | **14** | 3.6 seminar/laboratory | **14** |
| Time allocation | | | | | |
| Study using textbooks, course materials, bibliography and notes | | | | | **11** |
| Additional documentation in the library, on specialised electronic platforms and in the field | | | | | **8** |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | | | | | **2** |
| Tutoring | | | | | **-** |
| Examinations | | | | | **1** |
| Other activities: | | | | | **-** |

| | |
|---|---|
| 3.7 Total hours of individual study | **22** |
| 3.8 Total hours per semester | **50** |
| 3.9. Number of credits | **2** |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Kinesiology, Assessment Methods in Physiotherapy, General Principles of Physiotherapy |
| 4.2 Skills | CC4., CP1., CP2., CP9. |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Room equipped with projector, computer, internet access and online platforms, course materials in electronic format (.ppt, .doc, .pdf), scientific medical films. |
| 5.2 for conducting the seminar/laboratory | Physiotherapy room, practical demonstrations. |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC4. |
| 6.2. Professional skills | CP1, CP6, CP13, CP34, CP57. |
| 6.3. Transversal competences | CT2., CT4., CT6., CT16. |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | The student identifies general and age-specific behavioural aspects, pathology and population categories before, during and after intervention, in order to maximise the effects of the rehabilitation process. |
| 7.2.Skills/abilities | 1.2. Uses terminology according to motor activities.<br>1.3. Distinguishes the role and place of the physiotherapist in different professional contexts. |
| 7.3. Responsibility and autonomy | 1.3.1. Identifies the duties of the physiotherapist within interdisciplinary teams.<br>5.1.1.Complies with legal and professional standards in relation to beneficiaries.<br>5.2.1. Provides quality functional rehabilitation services in accordance with professional standards. |

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | To acquire the biological basis of natural factors in balneotherapy and to develop a specialised culture by developing students' knowledge and practical skills in the field of balneoclimatology and thermotherapy. |
| 8.2. Specific objectives | Understanding the immediate and delayed adaptations of somatic and vegetative functions<br>to natural factors used in recovery treatment<br>Knowledge of hydrotherapy and balneoclimatology sections as specific therapeutic modalities<br>specific therapeutic modalities of physical and recovery medicine. |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| 1. Balneophysiotherapy: definition, history, general mode of action of physical factors | Systematic presentation - Lecture | **2** |
| 2. Treatment in balneoclimatic resorts: methods of treatment in balneotherapy, prophylactic balneotherapy, therapeutic and recovery treatments | Systematic presentation - Lecture | **2** |
| 3. Mineral waters used in balneotherapy: definition, mode of action, physical and chemical characteristics, classification | Systematic presentation - Lecture | **2** |
| 4. Techniques and methods for using mineral waters in therapy (external treatment, crenotherapy, inhalations and aerosols, intestinal lavages, irrigations, parenteral and cutaneous administration of mineral water extracts). | Systematic presentation - Lecture | **2** |
| 5. Local and general hydrothermotherapy procedures general hydrothermotherapy procedures: definition, methods of application, particularities of action, indications and contraindications , | Systematic presentation - Lecture | **2** |
| 6. Medical climatology. Bioclimatic elements important in therapy. Classification of bioclimates in Romania. | Systematic presentation - Lecture | **2** |
| 7. Climate and bioclimate; specific forms of climatotherapy: thalassotherapy, heliotherapy, aerotherapy, land cure, therapeutic salt mines | Systematic presentation - Lecture | **2** |
| Bibliography: | | |

| | | |
|---|---|---|
| Eugenia Roşulescu. Kinetotherapy in the recovery of rheumatic diseases. Universitaria Publishing House, Craiova, 2009<br>Teleki N., Lavinia Munteanu –Romania balneara-Bucharest, 2004<br>Kiss I. Physiokinesitherapy and medical recovery, Medical Publishing House, Bucharest, 2002.<br>Haulica, I. Human Physiology, 3rd edition, Medical Publishing House, Bucharest, 2007. | | |
| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
| 1. Principles of balneology. Basic objectives. Balneotherapy: types, indications, applicability. | Explanations<br>Practical applications | **2** |
| 2. Presentation of the department, the treatment base, how balneoclimatological treatment is prescribed. | Explanations<br>Practical exercises<br>Practical applications | **2** |
| 3. Balneotherapy: types, indications, applicability. | Explanations<br>Practical applications | **2** |
| 4. Hydrotherapy – applicability in recovery, examples. Indications and methods of application of hydrotherapy – poultices, underwater showers, Kneipp therapy – presentation of balneotherapy resorts | Explanations<br>Practical exercises<br>Practical applications | **2** |
| 5. Analysis of the particularities of the "natural therapeutic factor", offering different scenarios: balneoclimatology - definition, objectives, effects, indications, contraindications. | Explanations<br>Practical exercises<br>Practical applications | **2** |
| 6. Analysis of the particularities regarding the application of natural therapeutic factors in degenerative and inflammatory joint and abarticular disorders, offering different pathology scenarios. | Explanations<br>Practical exercises<br>Practical applications | **2** |
| 7. Analysis of the particularities regarding the application of natural therapeutic factors in post-traumatic sequelae of the locomotor system and in peripheral and central neurological disorders, depending on the pathology. | Explanations<br>Practical exercises<br>Practical applications | **2** |
| Bibliography<br>Cinteză Delia, Medical Recovery - Thermotherapy, Vox Publishing House, Bucharest, 2003<br><br>Course support<br>Teleki N., Lavinia Munteanu –Romania balneara-Bucharest, 2004<br>Kiss I. Physiokinesitherapy and Medical Recovery, Medical Publishing House, Bucharest, 2002. | | |

**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

| |
|---|
| The training aims to provide students with an understanding of the role of balneoclimatology and balneotherapy, so that future physiotherapists can make the right decisions regarding case management at different levels of healthcare and within multidisciplinary teams. The content of the course is in line with the requirements of professional associations and employers. |

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | Assessment of acquired knowledge | Written colloquium | 50 |
| | | | |

| | | | |
|---|---|---|---|
| 11.2. Seminar/laboratory | Degree of active participation in practical work | Continuous assessment throughout the activity | 25 |
| | Practical assessment | Practical oral assessment | 25 |
| 11.3. Minimum performance standard | | | |
| - at least 2 interventions during interactive classes<br>- obtaining a grade of 5 in the theoretical assessment<br>- obtaining a grade of 5 in the practical assessment | | | |

Date of completion 01. 09.2025

Signature of course instructor Assoc. Prof. Dr. Roșulescu Eugenia

Signature of the seminar holder Assoc. Prof. Dr. Roșulescu Eugenia

Assoc. Prof. Dr. Zăvăleanu Mihaela

Date of approval by the department 15.09.2025

Signature of the head of department Prof. Rusu Ligia

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

**COURSE DESCRIPTION**
**2027 - 2028**

## 1. PROGRAMME DETAILS

| | |
|---|---|
| 1.1 Higher education institution | **University of Craiova** |

| | |
|---|---|
| 1.2 Faculty/department | **Faculty of Physical Education and Sport/Department 6** |
| 1.3 Department | **Kinesiotherapy and Sports Medicine** |
| 1.4 Field of study | **Sports Science and Physical Education** |
| 1.5 Cycle of studies[1] | **Bachelor's degree - cycle 1** |
| 1.6 Study programme (name/code)[2] /Qualification | **Kinetotherapy and special motor skills/Physiokinetotherapist - COR code 226401;**<br>**Kinetotherapist - COR code 226405;** |

## 2. INFORMATION ABOUT THE DISCIPLINE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | | | | **ELEMENTS OF PHARMACOLOGY** | | | |
| 2.2 Course coordinator | | | | **Associate Professor Ilinca Ilona** | | | |
| 2.3 Seminar coordinator | | | | **Associate Professor Ilinca Ilona** | | | |
| 2.4 Year of study | **3** | 2.5 Semester | **VI** | 2.6 Type of assessment | **C** | 2.7 Course requirements (compulsory) | **DOP** |

## 3. TOTAL ESTIMATED TIME (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | **2** | of which: 3.2 course | **1** | 3.3 seminar/laboratory/project | **1** |
| 3.4 Total hours in the curriculum | **28** | of which: 3.5 course | **14** | 3.6 seminar/laboratory/project | **14** |
| 3.7 Distribution of time | | | | | hours |
| ▪ Study using textbooks, course materials, bibliography and notes | | | | | 8 |
| ▪ Additional documentation in the library, on specialised electronic platforms and in the field | | | | | 6 |
| ▪ Preparation of seminars/laboratories, assignments, reports, portfolios and essays | | | | | 4 |
| ▪ Tutoring | | | | | - |
| ▪ Examinations | | | | | 2 |

| | |
|---|---|
| ▪ Other activities: consultations, student clubs | 2 |

| | |
|---|---|
| **Total hours of individual activities** | **2** |
| 3.8 Total hours per semester | **50** |
| 3.9 Number of credits | **2** |

**4. PREREQUISITES** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Anatomy, Physiology, Electrotherapy |
| 4.2 Skills | - |

**5. CONDITIONS** (where applicable)

| | |
|---|---|
| 5.1. Course delivery | Room equipped with projector, laptop/computer, internet access and online platforms, electronic materials (ppt, .doc, .pdf, video, films, images) |
| 5.2. for conducting the seminar/laboratory/project | Room equipped with projector, laptop/computer, internet access and online platforms, electronic materials (ppt, .doc, .pdf, video, films, images) |

**6. SKILLS**

| | |
|---|---|
| 6.1. Key competences | CC2, CC4 |
| 6.2. Professional skills | CP5, CP6, CP9, CP14, CP19, CP34 |
| 6.3. Transversal competences | CT1, CT2, CT5, CT7, CT12 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | - The student defines general concepts and describes the biochemical and pathophysiological mechanisms of diseases, the anatomical and pathological bases of changes |

| | |
|---|---|
| | induced by pathology, with a view to implementing rehabilitation programmes. |
| 7.2. Skills/abilities | - Students present fundamental concepts regarding the general mechanisms of disease production.<br>- Students characterise biochemical changes according to health status and level of physical exertion. |
| 7.3. Responsibility and autonomy | - The student recognises the changes induced by pathology and their causes.<br>- Students establish physical exertion parameters based on intervention objectives. |

**8. COURSE OBJECTIVES** (based on the competency grid)

| | |
|---|---|
| 7.1 General objective of the discipline | - Acquiring theoretical principles related to general pharmacology and the medication of various organs and systems of the human body. |
| 7.2 Specific objectives | - Training of the physiotherapist, capable of mastering a system of knowledge, the indications and contraindications for the use of common medications and how they interfere with physical effort |

**9. CONTENT**

| **9.1. Course** | Teaching methods | No. of hours |
|---|---|---|
| - Key concepts in pharmacodynamics and pharmacokinetics | ▪ Presentation of theoretical concepts using PowerPoint<br>▪ Interactive courses based on discussions of course notes or previously acquired knowledge | 2 |
| - Classification of medicines | | 2 |
| - Factors influencing the action of medicines | | 2 |
| - Effects of drugs on the nervous system | | 2 |
| - Effects of drugs on the muscular system | | 2 |
| - Effects of drugs on the cardiovascular and respiratory systems | | 2 |
| - Effects of drugs on the geriatric population | | 2 |
| Bibliography<br>1.Alexandrescu. L. Elements of semiology and pharmacology for physiotherapists, Ed. Romania de mâine | | |

Foundation, 2007

2.Cristea A.N., Treatise on pharmacology, 1st edition, Medical Publishing House, Bucharest, 2017.

3.Dobrescu D, Negreş S, Dobrescu L, McKinnon R. MEMOMED 2020, University Publishing House, Bucharest, 2020. 4.Chiriţă C, Marineci D, Medical Agenda, pocket edition, Medical Publishing House, Bucharest, 2020.

5. Jimborean G., Ianoşi E.S., Comes A. - Respiratory Recovery and Balneophysiokinesitherapy in Respiratory Diseases, University Press, 2013.

| **9.2.Seminar/laboratory** | Teaching methods | No. of hours |
|---|---|---|
| - The relationship between medication and physical exercise in cardiovascular diseases | Lecture + debate + studies - Presentations of Case + Demonstration | 2 |
| - The relationship between medication and physical exercise in neurological diseases | | 2 |
| - The relationship between medication and exercise in diabetes mellitus | | 2 |
| - The relationship between medication and exercise in the treatment of obesity | | 2 |
| - Adverse effects of medication, drug interactions | | 2 |
| - Contraindications of medications in physical activity | | 2 |
| - Effects associated with polypharmacy in the recovery of elderly people | | 2 |

Bibliography

1.Alexandrescu. L. Elements of semiology and pharmacology for physiotherapists, Ed. Romania de mâine Foundation, 2007

2.Cristea A.N., Treatise on pharmacology, 1st edition, Medical Publishing House, Bucharest, 2017.

3.Dobrescu D, Negreş S, Dobrescu L, McKinnon R. MEMOMED 2020, University Publishing House, Bucharest, 2020. 4.Chiriţă C, Marineci D, Medical Agenda, pocket edition, Medical Publishing House, Bucharest, 2020.

5. Jimborean G., Ianoşi E.S., Comes A. - Respiratory Recovery and Balneophysiokinesitherapy in Respiratory Diseases, University Press, 2013.

**10. CORRELATION OF THE CONTENTS OF THE DISCIPLINE WITH THE EXPECTATIONS OF REPRESENTATIVES OF THE EPISTEMIC COMMUNITY, PROFESSIONAL**

**ASSOCIATIONS AND REPRESENTATIVE EMPLOYERS IN THE FIELD RELATED TO THE PROGRAMME**

| |
|---|
| The content corresponds to the needs of the labour market and the requirements of the scientific community. |

**11. EVALUATION**

| Type of activity | 11.1 Evaluation criteria | 11.2 Evaluation methods | 11.3 Weighting in the final mark |
|---|---|---|---|
| 11.1 Course | Level of active participation in classes<br>Level of mastery of course content | Written exam consisting of a multiple-choice test | 80 |
| 11.2 Practical activities | Degree of active participation in practical activities | Oral exam | 20 |
| 11.3 Minimum performance standard<br>▪ At least 2 interventions during interactive classes<br>▪ Obtaining a grade of 5 in the written exam assessing theoretical knowledge<br>▪ Obtaining a grade of 5 in the assessment of practical activities | | | |

| Date of completion | Signature of course lecturer | Signature of the seminar holder |
|---|---|---|
| 01.09.2025 | Associate Professor Ilinca Ilona | Associate Professor Ilinca Ilona |

| Date of approval by the department | Signature of the head of department |
|---|---|
| 15.09.2025 | Prof. Rusu Ligia |

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

# SUBJECT DESCRIPTION
# 2027-2028

## 1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | **University of Craiova** |
| 1.2 Faculty | **Physical Education and Sport/Department 6** |
| 1.3 Department | **Kinesiotherapy and Sports Medicine** |
| 1.4 Field of study | **Sports Science and Physical Education** |
| 1.5 Cycle of studies | **Bachelor's degree - cycle I** |
| 1.6 Study programme/Qualification | **Kinetotherapy and Special Motor Skills/Physiokinetotherapist - *COR code 226401; Kinetotherapist - COR code 226405*** |

## 2. Information about the discipline

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | | | **Elements of clinical laboratory** | | | | |
| 2.2 Course coordinator | | | **Assoc. Prof. Dr. Băcănoiu Manuela Violeta** | | | | |
| 2.3 Seminar coordinator(s) | | | **Associate Professor Dr. Băcănoiu Manuela Violeta** | | | | |
| 2.4 Year of study | 3 | 2.5 Semester | VI | 2.6 Type of assessment | C | 2.7 Course requirements | DOP |

## 3. Total estimated time (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 2 | of which: 3.2 lectures | 1 | 3.3 laboratory | 1 |
| 3.4 Total hours in the curriculum | 28 | of which: 3.5 lectures | 14 | 3.6 laboratory | 14 |
| Distribution of time | | | | | hours |
| • Study using textbooks, course materials, bibliography | | | | | 10 |
| • Additional documentation in the library, on specialised electronic platforms | | | | | 9 |
| • Preparation for seminars/laboratories, assignments, reports, portfolios and essays | | | | | 2 |
| • Tutoring | | | | | - |
| • Examinations | | | | | 1 |
| • Other activities: consultations, student circles | | | | | - |

| | |
|---|---|
| **3.7 Total hours of individual activities** | 2 |
| 3.8 Total hours per semester | 50 |
| 3.9 Number of credits | 2 |

## 4. PREREQUISITES (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Proper acquisition of knowledge taught in the specialised subjects related to the bachelor's degree programme. |
| 4.2 Skills | Fulfilment of the minimum standards for professional and transversal competences specific to the study programme |

## 5. CONDITIONS (where applicable)

| | |
|---|---|
| 5.1 Course delivery | room with technical equipment - PC, video projector, screen or |

| | |
|---|---|
| | online platform |
| 5.2 for conducting the seminar/laboratory/project | room with technical equipment - PC, video projector, screen or online platform |

**6. SKILLS**

| | |
|---|---|
| **6.1. Key competences** | CC3, CC4, CC5, CC7 |
| **6.2. Professional skills** | CP1, CP2, CP3, CP6, CP7, CP8, CP9, CP11, CP14, CP15, CP18, CP19, CP22, CP23, CP24, CP26, CP27, CP30, CP34, CP35, CP36, CP37, CP45, CP50, CP56, CP57 |
| **6.3. Transversal competences** | CT1, CT3, CT6, CT7, CT8, CT10, CT12, CT13, CT14, CT16, CT17, CT18 |

**7. LEARNING OUTCOMES**

| | |
|---|---|
| **7.1. Knowledge** | -The student/graduate defines the general, structural and functional concepts of the human body in order to develop rehabilitation programmes, defines the main types of analyses, explains the procedures and rules for collecting biological samples,<br>-Identify general and age-specific behavioural aspects, pathology and population categories before, during and after intervention in order to maximise the effects of the rehabilitation process.<br>-Identifies elements of national and EU legislation and policies in the exercise of the profession. |
| **7.2. Skills/ skills** | -The student/graduate identifies the structures and functions of the body and methods of assessing biological functions, laboratory values and their correlation with various pathologies.<br>- The student/graduate presents fundamental notions regarding the general mechanisms of disease production and characterises biochemical changes according to health status and physical effort. |
| **7.3. Responsibility and autonomy** | -The student/graduate recognises the changes induced by pathology and their causes and establishes physical exertion parameters according to the intervention objectives.<br>-The student/graduate applies national and international legislation governing the relationship between rehabilitation service providers and beneficiaries. |

**8. COURSE OBJECTIVES** (based on the competency grid)

| | |
|---|---|
| **8.1 General objective of the discipline** | Knowledge of general clinical laboratory concepts and techniques used in the fields of haematology, clinical chemistry, immunology and microbiology. |
| **8.2 Specific objectives** | To explain the analytical principles, methods and laboratory equipment used in the four departments: haematology, clinical chemistry, immunology and microbiology. |

**9. CONTENT**

| **9.1 Course** | **Teaching methods** | **No. of hours** |
|---|---|---|
| 1. Introduction to the clinical laboratory: organisation and | Lecture | 2 |

| | | |
|---|---|---|
| safety rules | | |
| 2. Types of biological samples. Collection, transport and storage of biological samples | Lecture | 2 hours |
| 3. Haematological analyses: complete blood count, coagulation tests, immunohematological tests (ABO group, Rh factor), ESR | Lecture | 2 hours |
| 4. Clinical chemistry tests: biochemical tests by spectrophotometry, serum protein electrophoresis, complete urine test | Lecture | 2 |
| 5. Serological and immunological analyses: determination of specific proteins, hormones, tumour markers and infectious markers | Lecture | 2 hours |
| 6. Microbiological analyses. Urine culture, stool culture, microbiological secretions | Lecture | 2 hours |
| 7. Laboratory diagnosis. Monitoring and interpretation of laboratory tests in a clinical context. | Lecture | 2 hours |

**Bibliography**

-Căruntu, C. (2018). Manual of medical laboratory analyses. Iași: Polirom Publishing House.
-Căruntu, F. (2015). Guide to Medical Analysis. Bucharest: Medical Publishing House.
-Niculescu, A. (2016). Clinical Laboratory Techniques. Timișoara: Brumar Publishing House.
-Mureșan, M. (2020). Fundamentals of Clinical Biochemistry. Cluj-Napoca: Medical University Publishing House.
-Burtis, C. A., & Bruns, D. E. (2019). Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics. Elsevier.

| **9.2 Seminar/laboratory** | **Teaching methods** | **No. of hours** |
|---|---|---|
| 1. Collection, transport and preparation of biological samples | Lecture | 2 |
| 2. Laboratory techniques in haematology | Lecture | 2 hours |
| 3. Laboratory techniques in clinical chemistry | Lecture | 2 hours |
| 4. Laboratory techniques in serology and immunology | Lecture | 2 hours |
| 5. Laboratory techniques in microbiology | Lecture | 2 hours |
| 6. Interpretation of laboratory test results | Lecture | 2 hours |
| 7. Case studies | Lecture | 2 hours |

**Bibliography**

-Căruntu, C. (2018). Manual of Medical Laboratory Analyses. Iași: Polirom Publishing House.
-Căruntu, F. (2015). Medical Analysis Guide. Bucharest: Medical Publishing House.
-Niculescu, A. (2016). Clinical Laboratory Techniques. Timișoara: Brumar Publishing House.
-Mureșan, M. (2020). Fundamentals of Clinical Biochemistry. Cluj-Napoca: Medical University Publishing House.
-Burtis, C. A., & Bruns, D. E. (2019). Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics. Elsevier.

**10. Corroboration of the course content with the expectations of representatives of professional associations and employers in the field relevant to the programme**

The discipline provides students with a methodological framework and responds to the needs of professional associations and employers through its content. It represents a starting point for those who wish to pursue master's and doctoral studies and advanced scientific research, providing the necessary skills for the public and private sectors in Romania and the European Union.

**11. EVALUATION**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final mark |
|---|---|---|---|
| **11.1 Course** | - correct assimilation of the concepts taught;<br>- a comprehensive understanding of the importance of the subject studied and its connection to other fundamental subjects;<br>- logical coherence;<br>- degree of assimilation of specialised language | Assessment grid/report | 70 |
| **11.2 Seminar/ laboratory** | acquisition of the notions, concepts and issues taught in the course and their practical application;<br>- ability to develop a scientific project | - Development of a scientific project | 30% |
| | | | |
| **11.3** Minimum performance standard (minimum knowledge required to pass the course and how it is assessed) | | | |
| Developing a sampling programme and knowing the types of analyses, correctly interpreting the results of medical analyses. | | | |

**Date of completion:** 01.09.2025

**Signature of the course lecturer**
Assoc. Prof. Dr. Băcănoiu ManuelaVioleta

**Signature of the seminar holder**
Assoc. Prof. Dr. Băcănoiu ManuelaVioleta

**Date of approval in the department:**
15.09.2025

**Signature of the head of department**
Prof. Ligia Rusu

**Physiotherapy in oncological conditions UNIVERSITY OF CRAIOVA-FEFS DEPARTMENT - KINETOTHERAPY AND SPORTS MEDICINE (D06)**

**SUBJECT DESCRIPTION**
**2027-2028**

**1. Programme details**

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor *skills/Physiokinetotherapist - COR code 226401; Kinetotherapist - COR code 226405;* |

**2. Information about the discipline**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **Physiotherapy in the ICU** | | | | | | |
| 2.2 Course coordinator | Prof. RUSU LIGIA | | | | | | |
| 2.3 Seminar coordinator(s) | Assistant Professor PIELE DENISA | | | | | | |
| 2.4 Year of study | 3 | 2.5 Semester | VI | 2.6 Type of assessment | C | 2.7 Discipline regime | DOP |

**3. Total estimated time** (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 2 | of which: 3.2 lectures | 1 | 3.3 seminar/laboratory | 1 |
| 3.4 Total hours in the curriculum | 28 | of which: 3.5 course | 14 | 3.6 seminar/laboratory | 14 |

| Distribution of time | hours |
|---|---|
| Study using textbooks, course materials, bibliography and notes | 10 |
| Additional research in the library, on specialised electronic platforms and in the field | 5 |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | 5 |
| Tutoring | - |
| Examinations | 2 |
| Other activities | - |

| | |
|---|---|
| 3.7 Total hours of individual study | 22 |
| 3.8 Total hours per semester | 50 |
| 3.9. Number of credits | 2 |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Notions of anatomy, physiology and pathophysiology |
| 4.2 Skills | Not applicable |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | Classroom with technical equipment - PC, video projector, screen |
| 5.2 for conducting the seminar/laboratory | Sf Nectarie Oncology Centre – hospital, intensive care unit |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC1, CC3 |
| 6.2. Professional skills | CP3, CP5, CP6, CP8, CP9, CP10, CP17 |
| 6.3. Transversal skills | CT2, CT6, CT9, CT10, CT11, CT12 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | --- The student/graduate defines the general, structural (anatomical) and functional concepts of the human body, with a view to developing rehabilitation programmes<br>- The student/graduate defines the general concepts and describes the biochemical and pathophysiological mechanisms of diseases, the anatomical and pathological bases of changes induced by pathology, with a view to implementing rehabilitation programmes. |
| 7.2.Skills/abilities | -1.1. Uses the fundamental concepts of human motor skills in various contexts. 1.2. Uses terminology according to motor activities.<br>1.3. Distinguishes the role and place of the physiotherapist in different professional contexts.<br>2.1. Identify the structures and functions of the human body and methods for assessing biological functions.<br>2.2. Presents the actions of different muscle groups and movement parameters.<br>3.2. Characterises biochemical changes according to health status and level of physical exertion.<br>4.1. Explains the role of the human psyche in the rehabilitation process. |
| 7.3. Responsibility and autonomy | 1.1.1. Gives examples of motor acts, actions and activities.<br>1.2.1.Justify the use of specialised terminology in debates in the field.<br>1.3.1. Identify the duties of the physiotherapist within interdisciplinary teams.<br>2.1.1. Integrates fundamental concepts regarding the structures and functions of the human body into the rehabilitation process.<br>2.2.1. Recognises movement characteristics and their parameters<br>3.1.1. Recognises changes induced by pathology and their causes. |

| | |
|---|---|
| | 3.2.1. Establishes the parameters of physical effort according to the intervention objectives.<br>5.1.1. Complies with legal and professional standards in relation to beneficiaries. |

.

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | Developing students' theoretical and practical skills in assessing and applying physiotherapy techniques to prevent complications, facilitate functional recovery, and actively participate in the multidisciplinary team in the Anaesthesia and Intensive Care (AIC) departments. |
| 8.2. Specific objectives | At the end of the course, students will be able to:<br>5. **Explain** the pathophysiological characteristics of ICU patients<br>6. **Perform** a functional assessment of the ICU patient and **identify** possible complications arising from immobilisation<br>7. **Apply** respiratory recovery techniques for ICU patients<br>8. **Understand** the principles of early mobilisation and the safety criteria for mobilising patients in the ICU<br>9. **Develop and apply** personalised recovery programmes through exercises and physiotherapy techniques adapted to the ICU patient.<br>10. **Collaborate** effectively in a multidisciplinary team and demonstrate responsibility, empathy and respect when working with cancer patients. |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| 1. Characteristics of patients in the ICU | Interactive lecture | 1 |
| 2. General principles of patient recovery in the ICU | Interactive lecture | 1 |
| 3. Monitoring the vital functions of patients in the ICU | Interactive lecture | 2 |
| 4. Principles of mechanical ventilation | Interactive lecture | 1 |
| 5. Cardio-respiratory assessment tailored to patients in the ICU | Interactive lecture | 1 |
| 6. Physiotherapy intervention on the respiratory system adapted to the patient in the ICU | Interactive lecture | 2 |
| 7. The importance of early mobilisation of patients in the ICU | Interactive lecture | 1 |
| 8. Potential complications for patients in the ICU | Interactive lecture | 1 |
| 9. Use of specific equipment in ICU physiotherapy | Interactive lecture | 1 |
| 10. Physiotherapy management adapted to unstable patients | Interactive lecture | 1 |
| 11. The role of the physiotherapist working in the ICU within the multidisciplinary team | Interactive lecture | 1 |
| 12. Psychological and ethical aspects in the management of ICU patients | Interactive lecture | 1 |

Bibliography


1. Stiller K. *Physiotherapy for the Critically Ill*. 2nd ed. Elsevier; 2014.
2. Gosselink R, Clerckx B, Robbeets C, Vanhullebusch T, van der Schaaf M. *Physiotherapy in the Intensive Care U : An Evidence-Based Approach*. Springer; 2021.
3. Tobin MJ. *Principles and Practice of Mechanical Ventilation*. 3rd ed. McGraw-Hill; 2013.
4. Bissett B, Denehy L, Green M, editors. *Physical Therapy in Critical Illness*. Springer; 2016.
5. Dudea SM, coord. *Radiology and Medical Imaging*. Bucharest: Medical Publishing House; 2015.
6. Donner CF, Ambrosino N, Goldstein RS**.** *Pulmonary Rehabilitation*. 2nd ed. CRC Press; 2021.
7. Gosselink R, Decramer M, Troosters T**.** *Pulmonary Rehabilitation in Chronic Obstructive Pulmonary Disease*. Springer; 2018.
8. Ambrosino N, Makhabah DN. *Physiotherapy in the ICU*. Springer; 2017


| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
|---|---|---|
| 1. Organisation of the ICU | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 2. Assessment of vital signs | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 3. Respiratory assessment of patients in the ICU | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 2 |
| 4. Respiratory recovery techniques applied to patients in the ICU (bronchial drainage) | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 2 |
| 5. Respiratory recovery techniques applied to patients in the intensive care unit (adapted exercises) | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 6. Passive techniques for early mobilisation | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation | 1 |

| | | |
|---|---|---|
| | of practical applications | |
| 7. Active techniques for early mobilisation and transfers | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 8. Physiotherapy interventions for the prevention of complications | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 9. Physiotherapy interventions for the management of unstable patients | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 10. Completing the forms with physiotherapy interventions | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 1 |
| 11. Integrated case studies | Explanation<br>Demonstration<br>Practice<br>Practical applications<br>Methodical presentation of practical applications | 2 |

Bibliography

1 Nica AS**.** *Medical recovery*. Carol Davila University Publishing House; 2004

2. Sbenghe T**.** *Medical recovery of respiratory patients*. Medical Publishing House; 1983.

3. Postolache P, Marciniuk D**.** *Handbook of Pulmonary Rehabilitation*. Nova Science Publishers; 2020.

4. Criner GJ, Martin U, Nava S**.** *Pulmonary Rehabilitation in the Intensive Care Unit (ICU) and Transition to Home*. In: Criner GJ, editor. *Pulmonary Rehabilitation*. CRC Press; 2005

5. Hough A**.** *Physiotherapy in Respiratory Care: A Problem-Solving Approach to Respiratory and Cardiac Management*. Springer; 2022.

6. Jones AY**.** *Respiratory Physiotherapy in Intensive Care*. Blackwell Science; 1992.

7. Gosselink R, et al. *Cardiovascular and Respiratory Physiotherapy*. Elsevier; 2019

**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

| |
|---|
| The discipline "Physiotherapy in the ICU" ensures the development of the theoretical and practical skills necessary for the assessment and physiotherapeutic intervention of patients in the ICU, aligning the academic content with scientific standards, the recommendations of professional associations and the requirements of employers in intensive care units, in order to develop autonomous, responsible professionals who are able to contribute effectively to a multidisciplinary team |

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weight in the final assessment mark (%) |
|---|---|---|---|
| 11.1. Course | Acquisition, knowledge, presentation and explanation of the particularities of patients in the ICU. | Theoretical assessment | 50 |
| | | | |
| 11.2. Seminar/laboratory | Practical assessment – practical demonstrations related to the assessment of patients in the intensive care unit and the necessary physiotherapy intervention adapted to the patient's condition. Methodical presentation of the manoeuvres applied. | Practical assessment | 50% |
| | | | |
| 11.3. Minimum performance standard | | | |
| **The score on the written/oral assessment must be a passing grade (minimum 5).**<br>**The final score will be calculated by adding the results of the written/oral assessment and the practical assessment, and the minimum passing grade is 5.** | | | |

| Date of completion | Signature of course lecturer | Signature of the seminar lecturer |
|---|---|---|
| 01.09.2025 | Prof. Ligia Rusu, PhD | Assistant Professor Denisa Piele, PhD |

| Date of approval by the department | Signature of the head of department |
|---|---|
| 15.09.2025 | Prof. Ligia Rusu |

**UNIVERSITY OF CRAIOVA-FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

# SUBJECT DESCRIPTION
# 2027

## 1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor *skills/Physiokinetotherapist - COR code 226401;*<br>*Kinetotherapist - COR code 226405;* |

## 2. Information about the discipline

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **Rehabilitation and recovery in sport** | | | | | | |
| 2.2 Course coordinator | **Prof. Elena Taina Avramescu** | | | | | | |
| 2.3 Seminar coordinator(s) | **Prof. Elena Taina Avramescu** | | | | | | |
| 2.4 Year of study | 3 | 2.5 Semester | VI | 2.6 Type of assessment | C | 2.7 Course requirements | DOP |

## 3. Total estimated time (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | 2 | of which: 3.2 lectures | 1 | 3.3 seminar/laboratory | 1 |
| 3.4 Total hours in the curriculum | 28 | of which: 3.5 course | 14 | 3.6 seminar/laboratory | 14 |

| Distribution of time | hours |
|---|---|
| Study using textbooks, course materials, bibliography and notes | 8 |
| Additional documentation in the library, on specialised electronic platforms and in the field | 6 |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | 4 |
| Tutoring | - |

| | |
|---|---|
| Examinations | 2 |
| Other activities | 2 |

| | |
|---|---|
| 3.7 Total hours of individual study | 22 |
| 3.8 Total hours per semester | 50 |
| 3.9 Number of credits | 2 |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | NO |
| 4.2 Competency | NO |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | - |
| 5.2 for conducting the the seminar/laboratory | room with technical equipment - PC, video projector, screen |

**6. Skills**

| | |
|---|---|
| 6.1. Key skills | CC2, CC3, CC4 |
| 6.2. Professional skills | CP9, CP11, CP12, CP13, CP15, CP16, CP19, CP39, CP41, CP45, CP56, CP 57 |
| 6.3. Transversal competences | CT1, CT2, CT10, CT13, CT16 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | Explain the role of recovery and rehabilitation in maintaining athletic performance and preventing injuries.<br>Describe the main methods of post-exercise recovery (stretching, massage, cryotherapy, hydrotherapy, relaxation techniques).<br>Recognise the signs of overexertion and fatigue in athletes. |
| 7.2. Skills | Correctly apply practical recovery and rehabilitation methods according to the type of exercise and the specific nature of the sport.<br>Selects and adapts recovery techniques to the athlete's level (junior, senior, amateur, professional).<br>Evaluates the athlete's response to the methods used and adjusts the intervention.<br>Integrates recovery procedures into the sports training plan. |
| 7.3. Responsibility and autonomy | Demonstrates responsibility and professionalism in applying recovery procedures.<br>Complies with safety regulations and professional ethics in their relationship with the athlete.<br>Collaborates effectively with the coach and other specialists to optimise the recovery process.<br>Promotes a balance between training, rest, recovery and nutrition. |

.

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | To develop the practical skills and knowledge necessary for the correct application of post-exercise recovery and rehabilitation methods, in order to optimise athletic performance and prevent injuries. |

| | |
|---|---|
| 8.2. Specific objectives | Explain the role of recovery and rehabilitation in the context of athletic training.<br>Identify recovery methods and correlate them with the type and intensity of exercise.<br>To correctly apply practical techniques such as stretching, massage, cryotherapy, hydrotherapy, and relaxation techniques.<br>Assess the level of fatigue and recovery capacity of athletes.<br>Adapt recovery procedures according to age, level of training and the specifics of the sport.<br>Integrate recovery methods into the sports training plan, in collaboration with other specialists.<br>Develop a responsible, ethical and preventive attitude when working with athletes. |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| **Introduction to sports recovery and rehabilitation**<br>• Definition and importance of recovery in competitive sports.<br>• The link between recovery, rehabilitation and sports performance.<br>• The concept of balance between training, rest and nutrition. | LECTURE | 1 |
| **The physiology of fatigue and post-exercise recovery**<br>• Types of fatigue: physical, mental, muscular, nervous.<br>• Physiological mechanisms of recovery.<br>• Parameters for monitoring fatigue in athletes (heart rate, RPE, clinical signs). | LECTURE | 1 |
| **General principles of recovery and rehabilitation**<br>• Stages of the recovery process.<br>• Factors influencing recovery.<br>• Planning recovery according to the type and intensity of the effort. | LECTURE | 1 |
| **Active recovery methods**<br>• Recovery through exercise: light jogging, mobility exercises, active stretching.<br>• Advantages and limitations of active recovery. | LECTURE | 1 |
| **Stretching in recovery and injury prevention**<br>• Types of stretching: static, dynamic, PNF.<br>• Rules of application and contraindications.<br>• The role of post-exercise stretching. | LECTURE | 1 |
| **Sports massage**<br>• Principles, physiological effects and indications.<br>• Types of massage: partial, general, recovery.<br>• Basic techniques: smoothing, kneading, tapping, etc. | LECTURE | 1 |
| **Cryotherapy in sports recovery**<br>• Physiological effects of cold.<br>• Methods of application: ice, cryomassage, cold | LECTURE | 1 |

| | | |
|---|---|---|
| baths.<br>• Indications and contraindications. | | |
| **Thermotherapy in muscle recovery**<br>• Physiological effects of heat.<br>• Types of thermal applications: hot baths, wraps, sauna.<br>• Combined hot-cold use. | LECTURE | 1 |
| **Hydrotherapy and recovery through water**<br>• Principles of water therapy.<br>• Alternating hot-cold baths, showers, jacuzzis.<br>• Effects on circulation and muscle relaxation. | LECTURE | 1 |
| **Recovery electrotherapy**<br>• Basics of electrostimulation.<br>• Types of currents used in muscle recovery.<br>• Benefits and precautions. | LECTURE | 1 |
| **Relaxation and breathing techniques**<br>• Breathing control and progressive relaxation techniques.<br>• Mental relaxation and its role in athlete recovery.<br>• Applicability in competitive sports. | LECTURE | 1 |
| **Nutritional recovery and hydration**<br>• The role of nutrition in the recovery process.<br>• Essential post-exercise nutrients.<br>• Supplements used in recovery and doping prevention. | LECTURE | 1 |
| **Recovery integrated into the sports training plan**<br>• Collaboration between physiotherapist, coach and doctor.<br>• Adapting methods according to the athlete's age and level.<br>• Monitoring progress and providing feedback to the athlete. | LECTURE | 2 |

| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
|---|---|---|
| **Introduction to recovery and rehabilitation** – their role in sports training. | Practical work | 1 |
| **Assessment** of **fatigue and overexertion in athletes** – simple monitoring methods (pulse, RPE, clinical signs). | Practical work | 1 |
| **Static and dynamic stretching** – practical application after exercise. | Practical work | 1 |
| **Relaxation and breathing techniques** – for reducing stress and fatigue. | Practical work | 1 |
| **Sports massage (partial)** – basic techniques for muscle recovery. | Practical work | 1 |
| **Sports massage (general)** – practical application after intense exercise. | Practical work | 1 |
| **Cryotherapy** – practical applications (ice, cold packs, | Practical | 1 |

| | | |
|---|---|---|
| cryomassage). | work | |
| **Thermotherapy** – application of heat for muscle relaxation and recovery. | Practical work | 1 |
| **Hydrotherapy** – alternating hot and cold baths, showers, effects on recovery. | Practical work | 1 |
| **Recovery electrostimulation** – principles and practical applications. | Practical work | 1 |
| **Recovery through exercise** – light jogging, active stretching, mobility exercises. | Practical work | 1 |
| **Active vs. passive recovery** – practical application and comparison. | Practical work | 1 |
| **Case studies** – choosing recovery methods based on the type of sport (e.g. team sports, individual sports). | ractical work | 1 |
| **Practical recap and final assessment** – integrated application of methods. | Practical assignment | 1 |

Bibliography


- Avramescu, E.T. (2012). *Nutrition and doping*. University course, University of Craiova.
- Rusu, A.C., Predescu, R. (2016). *Kinetotherapy in sport*. Discobolul Publishing House, Bucharest.
- Drăgan, I. (2002). *Sports medicine*. Medical Publishing House, Bucharest.


**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field relevant to the programme**

Meets the expectations of the academic and professional community by integrating the latest concepts and methods of post-exercise recovery, in accordance with the recommendations of relevant associations and the requirements of employers in the field of sports and medical recovery.

**11. Assessment**

| Type of activity | 11.1 Assessment criteria | 11.2 Assessment methods | 11.3 Weighting in the final mark (%) |
|---|---|---|---|
| 11.1. Course | Attendance + interactivity<br>Correct explanation of concepts and notions specific to rehabilitation and recovery in sport | Written exam (multiple choice test)<br>Oral exam | 50<br>20 |
| 11.2. Seminar/laboratory | Knowledge of the main methods (stretching, massage, cryotherapy, hydrotherapy, etc.) and their indications.<br>Correct and safe application of recovery methods. | Periodic assessments<br>Oral exam | 50<br>50 |
| 11.3. Minimum performance standard | | | |
| - perception and acquisition of knowledge acquired during practical training in a proportion of 70%<br>- clear and well-founded skills/knowledge, | | | |

Date of completion 01.09.2025

Signature of course coordinator
Prof. Avramescu Elena Taina

Signature of the seminar coordinator
Prof. Avramescu Elena Taina

Date of approval by the department
15.09.2025

Signature of the head of department
Prof. Ligia Rusu

**UNIVERSITY OF CRAIOVA - FEFS**
**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

# SUBJECT DESCRIPTION
# 2027

## 1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | University of Craiova |
| 1.2 Faculty/Department | Physical Education and Sport/Department 6 |
| 1.3 Department | Kinesiotherapy and Sports Medicine |
| 1.4 Field of study | Sports Science and Physical Education |
| 1.5 Cycle of studies | Bachelor's degree - cycle I |
| 1.6 Study programme/Qualification | Kinetotherapy and special motor skills/*Physiokinetotherapist - COR code 226401; Kinetotherapist - COR code 226405;* |

## 2. Information about the discipline

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | **INTERNSHIP IN BALNEAR-CARDIO-RESPIRATORY AND NEUROLOGICAL RECOVERY UNITS** | | | | | | |
| 2.2 Course coordinator | - | | | | | | |
| 2.3 Seminar coordinator(s) | **UNIVERSITY LECTURER DR. ENESCU BIERU DENISA** | | | | | | |
| 2.4 Year | **III** | 2.5 Semester | **VI** | 2.6 Type of assessment | **V** | 2.7 Course requirements | **DOB** |

## 3. Total estimated time (hours per semester of teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | **2** | of which: 3.2 lectures | - | 3.3 seminar/laboratory | **2** |
| 3.4 Total hours in the curriculum | **28** | of which: 3.5 course | - | 3.6 seminar/laboratory | **28** |
| Distribution of time | | | | | hours |

| | |
|---|---|
| Study using textbooks, course materials, bibliography and notes | **8** |
| Additional documentation in the library, on specialised electronic platforms and in the field | **4** |
| Preparation for seminars/laboratories, assignments, reports, portfolios and essays | **5** |
| Tutoring | **-** |
| Examinations | **3** |
| Other activities | **2** |

| | |
|---|---|
| 3.7 Total hours of individual study | **2** |
| 3.8 Total hours per semester | **50** |
| 3.9. Number of credits | **2** |

**4. Prerequisites** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Completion of the following courses: Kinetotherapy in cardiovascular, respiratory and neurological disorders. |
| 4.2 Skills | Knowledge of fundamental theoretical and practical concepts in the following disciplines: Kinetotherapy in cardiovascular, respiratory and neurological disorders. |

**5. Conditions** (where applicable)

| | |
|---|---|
| 5.1 Course delivery | - |
| 5.2 for conducting the seminar/laboratory | Kinetics recovery room, equipped with specialised apparatus and specific to kinetic therapy in specialised cardiovascular, respiratory and neurological rehabilitation institutions, such as hospitals and polyclinics. |

**6. Skills**

| | |
|---|---|
| 6.1. Key competencies | CC4, CC5 |
| 6.2. Professional skills | CP3, CP5, CP10, CP11, CP12, CP13, CP15, CP28, CP30, CP31, CP32, CP38, CP39, CP54, CP56, CP59 |
| 6.3. Transversal | CT1, CT2, CT3, CT5, CT6, CT9, CT11, CT13, CT16 |

**7. Learning outcomes**

| | |
|---|---|
| 7.1. Knowledge | The student defines the general, structural and functional concepts of the human body, with a view to developing kinetic rehabilitation programmes for people diagnosed with cardiovascular, respiratory or neurological disorders. |
| 7.2.Skills/abilities | Students identify the structures and functions of the human body and methods for assessing biological functions. |
| 7.3. Responsibility and autonomy | Students integrate fundamental concepts regarding the structures and functions of the human body into the kinetic rehabilitation process.<br>They recognise the characteristics of movement |

| | |
|---|---|
| | and their parameters necessary for the implementation of kinetic recovery protocols for people with cardiovascular, respiratory or neurological pathologies. |

**8. Course objectives** (based on the competency grid)

| | |
|---|---|
| 8.1. General objective of the discipline | - To develop practical skills specific to the kinetic recovery of patients with cardiovascular, respiratory and/or neurological pathologies. |
| 8.2. Specific objectives | - Knowledge of the indications and contraindications of kinetic recovery programmes specific to cardiovascular conditions (essential hypertension, acute myocardial infarction, acute arterial insufficiency, etc.), respiratory conditions (bronchial asthma, chronic obstructive bronchitis), neurological conditions (stroke, sciatic nerve paralysis).<br>- Adapting the kinetic exercise programmes ly to the age, gender, exercise capacity and secondary pathologies associated with the patients' underlying condition.<br>- Correct acquisition of the kinetic recovery methodology characteristic of each type of cardiovascular, respiratory or neurological patient.<br>- The ability of students to design and implement a physical therapy programme appropriate for cardiovascular, respiratory and/or neurological pathologies. |

**9. Content**

| 9.1. Course | Teaching methods | No. of hours |
|---|---|---|
| | - | - |
| Bibliography: - | | |
| 9.2.Seminar/laboratory | Teaching methods | No. of hours |
| 1. Medical history and functional assessment of patients with cardiovascular, respiratory and/or neurological s | **Practical demonstrations, discussions, case studies and presentations.** | 2 |
| 2. Objectives, methodology and techniques of kinetic recovery programmes for patients with cardiovascular, respiratory and neurological disorders | | 2 |
| 3. Testing cardiac exercise capacity and cardiovascular functional tests | | 2 |
| 4. Kinetic recovery programmes for functional cardiovascular disorders and essential hypertension | | 2 |
| 5. Kinetotherapy in ischaemic heart disease and acute myocardial infarction | | 2 |
| 6. Recommended physical exercises in the treatment of cardiac arrhythmias and valvular heart disease | | 2 |
| 7. Kinetics protocols used in the treatment of peripheral artery and vein diseases | | 2 |
| 8. Kinetic relaxation techniques, posture | | 2 |

| | | |
|---|---|---|
| and bronchial drainage in the recovery of respiratory dysfunctions | | |
| 9. Medical gymnastics for re-education of respiratory function, coughing and speaking in respiratory patients | | 2 |
| 10. Principles of kinetic recovery in peripheral motor neuron syndrome | | 2 |
| 11. Kinetotherapy in brachial plexus paralysis and sciatic nerve paralysis | | 2 |
| 12. Recommended kinetic programmes in cerebrovascular accidents and paraplegic s | | 2 |
| 13. Training and re-education in measured physical exercise for cardiovascular, respiratory and neurological patients | | 2 |
| 14. Case studies, presentations of patients with cardiovascular, respiratory and/or neurological pathologies. | | 2 |


Bibliography:

1. Enescu Bieru, D., *The importance of kinetic recovery programmes in cardiovascular pathology*, Universitaria Craiova Publishing House, Prouniversitaria Bucharest, 2014
2. Marza, D., *Kinetotherapy in cardiovascular disorders*, Practical workbook, University of Bacău, 1996
3. Reychler, G., Roesele, J., Delguste, P., *Respiratory Kinesitherapy*, Elsevier Masson Publishing House. Paris, 2007
4. Robănescu N., *Neuromotor re-education*, Medical Publishing House Bucharest, 2001
5. Rusu, L., *Kinetic Intervention in Neuromyartrokinetic System Disorders*, Universitaria Publishing House Craiova, 2007
6. Vasilescu, M., *Kinetotherapy for respiratory disorders*, Universitaria Publishing House, Craiova, 2007


**10. Corroboration of the course content with the expectations of representatives of the epistemic community, professional associations and representative employers in the field related to the programme**

The topics of the proposed practical activities (practical internship) are current issues in the field of cardiovascular, respiratory and neurological kinesitherapy, requiring a unified approach to cardiovascular, respiratory and neurological pathology in order to establish a complex, prophylactic and curative kinesitherapy treatment. The concepts taught are constantly updated with the latest specialist literature, with an emphasis on the possibilities of treating patients with cardiovascular, respiratory and neurological conditions effectively, individually and without side effects through movement patients with cardiovascular, respiratory and neurological conditions, and thus to continuously develop kinetic recovery programmes for the aforementioned pathologies, adapted to the requirements of the community, professional associations and employers in the respective field and related fields.

**11. Assessment**

| Type of activity | 11.1 Evaluation criteria | 11.2 Assessment methods | 11.3 Weight in the final mark (%) |
|---|---|---|---|
| 11.1. Course | - | - | - |

| | | | |
|---|---|---|---|
| 11.2. Seminar/laboratory | Presentation of kinetic exercise programmes recommended for the recovery of patients with cardiovascular, respiratory or neurological conditions, through active participation in the activities carried out during the internship | The assessment consists of the presentation of a clinical case, in the form of a case study, supported by the student, from the various pathologies encountered during the internship | 90 |
| | Attendance and participation of students in discussions during the internship | Periodic grading, through student assessment tests during the internship | 10 |
| 11.3. Minimum performance standard | | | |
| Minimum knowledge required to pass the course:<br>- basic mastery of the methodology and techniques of kinetic exercises specific to cardiovascular, respiratory and/or neurological recovery and their presentation by students.<br>- knowledge of the indications and contraindications of kinetic recovery programmes used in the treatment of patients with cardiovascular, respiratory and/or neurological conditions.<br>Method of assessing minimum knowledge:<br>- obtaining the grade Passed the assessment. | | | |

Date of completion: 01.09.2025

Signature of the course lecturer
-

Signature of the seminar lecturer
Conf. Univ. Dr. ENESCU BIERU DENISA

Date of approval by the department
15.09.2025

Signature of the head of department
Prof. Dr. RUSU LIGIA

**UNIVERSITY OF CRAIOVA-FEFS**

**DEPARTMENT - KINESIOTHERAPY AND SPORTS MEDICINE (D06)**

**SUBJECT DESCRIPTION**
**2027-2028**

1. Programme details

| | |
|---|---|
| 1.1 Higher education institution | **University of Craiova** |
| 1.2 Faculty | **Physical Education and Sport/Department 6** |
| 1.3 Department | **Kinesiotherapy and Sports Medicine** |
| 1.4 Field of study | **Sports Science and Physical Education** |
| 1.5 Cycle of studies | **Bachelor's degree - cycle I** |
| 1.6 Study programme/Qualification | **Kinetotherapy and Special Motor Skills/Physiokinetotherapist** - ***COR code 226401; Kinetotherapist - COR code 226405*** |

**2. INFORMATION ABOUT THE DISCIPLINE**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.1 Name of the discipline | | | **SCIENTIFIC RESEARCH METHODS** | | | | |
| 2.2 Course coordinator | | | **Associate Professor Dr. Băcănoiu Manuela Violeta** | | | | |
| 2.3 Seminar coordinator(s) | | | **Assistant Professor Piele Denisa** | | | | |
| 2.4 Year of study | 3 | 2.5 Semester | V | 2.6 Type of assessment | C | 2.7 Course requirements | DOB |

**3. TOTAL ESTIMATED TIME** (hours per semester, teaching activities)

| | | | | | |
|---|---|---|---|---|---|
| 3.1 Number of hours per week | **2** | of which: 3.2 lectures | **1** | 3.3 seminar/laboratory | **1** |
| 3.4 Total hours in the curriculum | **28** | of which: 3.5 course | **14** | 3.6 seminar/laboratory | **14** |
| Distribution of time | | | | | hours |
| ▪ Study based on textbook, course materials, bibliography | | | | | **20** |
| ▪ Additional documentation in the library, on specialised electronic platforms and in the field | | | | | **16** |
| ▪ Preparation for seminars/laboratories, assignments, reports, portfolios and essays | | | | | **6** |
| ▪ Tutoring | | | | | **-** |
| ▪ Examinations | | | | | **3** |
| ▪ Other activities: consultations, student clubs | | | | | **2** |

| | |
|---|---|
| **3.7 Total hours of individual activities** | **47** |
| 3.8 Total hours per semester | **75** |
| 3.9 Number of credits | **3** |

**4. PREREQUISITES** (where applicable)

| | |
|---|---|
| 4.1 Curriculum | Proper acquisition of knowledge taught in the specialised subjects related to the bachelor's degree programme |
| 4.2 Skills | Fulfilment of the minimum standards for professional and transversal competences specific |

| | |
|---|---|
| | to the study programme |

**5. CONDITIONS** (where applicable)

| | |
|---|---|
| 5.1. Course delivery | room with technical equipment - PC, video projector, screen or online platform/Classroom |
| 5.2. conducting the seminar/laboratory/project | room with technical equipment - PC, video projector, screen or online platform/Classroom |

**6. SKILLS**

| | |
|---|---|
| **6.1. Key skills** | CC3, CC4, CC5, CC7 |
| **6.2. Professional competences** | CP1, CP2, CP3, CP7, CP8, CP18, CP19, CP20, CP22, CP23, CP24, CP26, CP27, CP 30, CP 31, CP34, CP35, CP36, CP37, CP40, CP50, CP51, CP56, CP57, CP58 |
| **6.3. Transversal competences** | CT1, CT3, CT6, CT7, CT9, CT10, CT11, CT12, CT13, CT14, CT16, CT17, CT18 |

**7. LEARNING OUTCOMES**

| | |
|---|---|
| **7.1. Knowledge** | -The student/graduate defines the general, structural and functional concepts of the human body in order to develop rehabilitation programmes.<br><br>-Identify general and age-specific behavioural aspects, pathology and population categories before, during and after intervention in order to maximise the effects of the rehabilitation process.<br><br>-Identify elements of national and EU legislation and policies in the exercise of the profession. |
| **7.2. Skills/**<br><br>**skills** | The student/graduate explains the role of the psychological system in the rehabilitation process and demonstrates new techniques and methods for influencing the subject's behaviour. |
| **7.3. Responsibility and autonomy** | The student/graduate applies national and international legislation governing relations between rehabilitation service providers and beneficiaries. |

**8. COURSE OBJECTIVES** (based on the competency grid)

| | |
|---|---|
| 8.1 General objective of the discipline | Acquiring the methodological principles of scientific research in kinesitherapy and applying scientific methodological knowledge to plan, write and publicly defend scientific papers/bachelor's theses/dissertations. |
| 8.2 Specific objectives | - knowledge and understanding of scientific research methods, as well as the principles of approach techniques and mechanisms for organising such activities;<br>- development of research tools (questionnaires, interview guides, observation sheets, experimental protocols, etc.);<br>- formulation of research issues based on available resources;<br>- applying research methods in practice within a project, scientific paper, dissertation/master's thesis;<br>- understanding the mechanism of data processing and statistical analysis;<br>- effective use of bibliographic data;<br>- developing scientific research skills through interdisciplinary connections with theoretical and applied disciplines. |

**9. CONTENT**

| **9.1 Course** | No. of hours | Teaching methods |
|---|---|---|
| 1. Concepts, requirements and attitudes of scientific research in kinesiotherapy. | 2 | Lectures on the Google Classroom platform |
| 2. Stages and dynamics of scientific research. | 2 | |
| 3. Ethical principles in scientific research. | 2 | |
| 4. Sources of documentation in scientific research | 2 | |
| 5. Planning and organising the research concept (setting research objectives, formulating hypotheses, developing a coherent, uniform research project) | 2 | |
| 6. Development: scientific report, scientific essay, case study. | 2 | |
| 7. Research materials and methods (study samples, data collection, materials and working protocols, conducting experiments) | 2 | |
| 8. Qualitative data collection methods (interview: terminology, classification criteria, interview dynamics) | 2 | |

| | | |
|---|---|---|
| 9. Basic vocabulary of statistics: statistical unit, sample, population, statistical characteristics. | 2 | |
| 10. Case study methodology | 2 | |
| 11. Qualitative and quantitative statistical variables | 2 | |
| 12. Data analysis and interpretation | 2 | |
| 13. Study design | 2 | |
| 14. Publication of scientific research data | 2 | |
| TOTAL HOURS | 28 | |

**Bibliography**


-Chelcea S. (2010) - How to write a bachelor's thesis, a doctoral thesis, a scientific article in the field of social sciences and humanities, 4th edition, Ed. Comunicare.ro, Bucharest,

-Chirazi, M. (2016) - Research methods in physical education and sport, Ed. Alexandru Ioan Cuza University, Iași,

-Curtis, E., Drennan, Jonathan (2013). *Quantitative Health Research: Issues And Methods*. Maidenhead: Open University Press.

-Eco, U. (2014) - How to Write a Bachelor's Thesis, Revised Edition, Ed. Polirom, Iași.

-Epuran M. (2005) - Methodology of Research in Physical Activities: Physical Exercise, Sport, Fitness, FEST Publishing House, Bucharest.

-Epuran M., Vâjială G.E. (2008) – Research Methodology in Physical Education and Sport, Ed. Romania of Tomorrow Foundation, Bucharest.

-Galea I. (2010) – Methodology of scientific research in physical education and sport: syntheses and applications, Ed. Aurel Vlaicu University, Arad.

-Gheorghiu G (2003) – Course on scientific research methodology in physical education and sport, Ed. "Dunărea de jos" University Foundation, Galaţi.

-Turcu I. (2007) – Research methodology in physical education and sport, Transilvania University Press, Braşov.


| **9.2 Seminar/laboratory** | No. of hours | Teaching methods |
|---|---|---|
| 1. Criteria for choosing a research topic. | 2 | Debate, dialogue, presentation, demonstration, |
| 2. Stages and dynamics of scientific research. | 2 | |

| | | |
|---|---|---|
| 3. Ethics in scientific research. | 2 | examples – lectures on the Google Classroom platform |
| 4. Sources of documentation in the research of phenomena. | 2 | |
| 5. Observation. | 2 | |
| 6. Experimental methods and techniques used in the research process. | 2 | |
| 7. Statistical analysis of data. | 2 | |
| 8. Results of scientific research. | 2 | |
| 9. Discussions and interpretations. | 2 | |
| 10. Conclusions of scientific research. | 2 | |
| 11. Proper preparation of bibliographic notes. | 4 | |
| 12. Drafting and public defence of scientific papers. | 4 | |
| TOTAL HOURS | 28 | |

**Bibliography:**

-Chelcea S. (2010) - How to write a bachelor's thesis, a doctoral thesis, a scientific article in the field of social sciences, 4th edition, Ed. Comunicare.ro, Bucharest,

-Chirazi, M. (2016) - Research Methods in Physical Education and Sport, Ed. Alexandru Ioan Cuza University, Iași,

-Curtis, E., Drennan, Jonathan (2013). *Quantitative Health Research: Issues And Methods*. Maidenhead: Open University Press,

-David, D. (2006). *Clinical Research Methodology. Fundamentals.* Iași: Polirom.

-Eco, U. (2014) - How to write a bachelor's thesis, Revised edition, Polirom Publishing House, Iași.

-Epuran M. (2005) - Methodology of Research in Physical Activities: Exercise, Sport, Fitness, FEST Publishing House, Bucharest.

-Epuran M., Vâjială G.E. (2008) – Research Methodology in Physical Education and Sport, Ed. Romania of Tomorrow Foundation, Bucharest.

-Galea I. (2010) – Methodology of scientific research in physical education and sport: syntheses and applications, Ed. Aurel Vlaicu University, Arad.

-Gheorghiu G (2003) – Course on scientific research methodology in physical education and sport, Ed. "Dunărea de jos" University Foundation, Galaţi.

-Turcu I. (2007) - Research methodology in physical education and sport, Transilvania University Press, Braşov.

**10. Corroboration of the course content with the expectations of representatives of the community professional associations and representative employers in the field related to the programme**

In the process of developing the course, discussions were initiated with doctors and physiotherapists from physical education and sports faculties, as well as graduates employed in the field. The content is also correlated with that of courses with similar titles taught at prestigious European universities.

**11. EVALUATION**

| Type of | 11.1 Assessment criteria | 11.2 Assessment | 11.3 Weight in the final |
|---|---|---|---|

| | | | |
|---|---|---|---|
| activity | | methods | grade |
| 11.4 Course | - correct assimilation of the concepts taught;<br>- a comprehensive understanding of the importance of the subject studied and its connection to other fundamental subjects;<br>- logical coherence;<br>- degree of assimilation of specialised language. | Scientific paper assessment | 70% |
| 11.5 Seminar /laboratory | acquisition of the notions, concepts and issues taught in the course and their application in practice;<br>- ability to develop a scientific project. | Developing a scientific project | 30% |
| 11.6 Minimum performance standard | | | |
| - Correctly learning basic theoretical concepts and applying them in developing a scientific project. | | | |

**Date of completion: 01.09.2025**

**Signature of course lecturer**

Assoc. Prof. Dr. Băcănoiu Manuela Violeta

**Signature of the seminar lecturer**

Assistant Prof. Dr. Piele Denisa

**Date of approval by the department:**

**15**

**Signature of the head of department**

Prof. Ligia Rusu