HEALTH STUDIES DEPARTMENT

Undergraduate Professional Study of Physiotherapy

EQF Level 6 – First Cycle ISCED (Bachelor's)

September 2025

CONTENTS

UNDERGRADUATE PROFESSIONAL STUDY OF PHYSIOTHERAPY

The Physiotherapy undergraduate program performed at the University VEVU is one of the most attractive programs of its kind in the Republic of Croatia, which is confirmed by the fact that our students are qualified for independent work after finishing the program and find work with ease. Professors of both programs are experts of the highest caliber from different clinical fields and the practical part is performed in health institutions and our own excellently equipped Centre for sports diagnostic and recreation which was founded in 2005. Structure of the undergraduate Physiotherapy program is based on a narrow expert field of physiotherapy and clinical content with an obligatory inclusion of basic medicine and other health related subjects. Undergraduate level education enables students to learn knowledge and skills needed to assess conditions, set goals, and finally plan and implement physiotherapy with accordance to age, needs and particular problems of the person. After finishing the program, a student attains the title of Bachelor (baccalaureus/baccalaurea) of Physiotherapy (bacc. physioth.) and is qualified for a successful start of a carrier or continuation of studies in the specialist degree program Preventive Physiotherapy.

Level: Undergraduate Professional Studies

Title awarded upon completion: Bachelor (baccalaureus/baccalaurea) of Physiotherapy (bacc. physioth.)

Duration of the study programme: III Academic Year (6 semester)

Total ECTS credits: 240

ACADEMIC CALENDAR

Academic year: October current year – 30th September -next calendar year

WINTER SEMESTER

Lectures	October,– February,
Winter Exams	February , March ,
Additional exams	November– December – for earlier semester finished students
Christmas' holiday	December 24, – January 7,

SUMMER SEMESTER

Lectures	March – June
Summer Exams	June– July
Autumn Exams	August– September
Additional exams	April–May – for earlier semester finished students
Dean's exam period	September – according rules
Easter holidays	April

Summer vacation: end of July – end of August

Please note that faculties are allowed to change/adjust the academic calendar according to their internal processes!

So, consult also the faculty web page for more detailed information on this.

National Holidays

January 1	New Year's Day
January 6	Three Kings Day
March 31, April 1,	Easter Sunday and Monday
May 1	Labour Day
May 30	Statehood day
June 8	Corpus Christi
June 22	Anti-Fascist Struggle Day
August 5	Victory and Homeland Thanksgiving Day
August 15	Assumption of Mary
October 8	Independence Day
November 1	All Saints' Day

November 18	National Holiday - Remembrance Day for all victims of the Homeland War
December 25 -26	Christmas Day and St. Stephen's Day

CROATIAN HEI GRADING SYSTEM

The Croatian national grading system consists of five grades with numerical equivalents, from highest to lowest grade as follows:

- Excellent (izvrstan) – 5
- Very good (vrlo dobar) – 4
- Good (dobar) – 3
- Sufficient (dovoljan) – 2 Note: minimum pass grade
- Fail (nedovoljan) – 1 Note: requires student to retake exam/resubmit work

Notification: Learning outcomes for Professional trainings courses are recorded as P – Passed (non-graded assessment) and ECTS credits.

Croatian Higher Education System for more info.

COURSE CATALOGUE

Link for list of courses available per semester.

Link for learning outcomes.

LIST OF COURSES AVAILABLE TO INCOMING STUDENTS IN ENGLISH

integrated/practical

Courses offered in English are available either in an integrated format or through practical instruction. Additional courses from the previous list are arranged upon agreement with the respective course instructor and are delivered through consultative teaching.

Class name	ECTS credits	Class Mode (T/I/P)*	ISVU Code	Semester numb. / W – Autumn/ winter S – spring/summer
Anatomy With Histology I	5	I	289803	1W
Biomechanics	3	I	238285	1W
Physics I	2	I	238272	1W
Basics of Health Care	2	I	78733	1W
Physiology with Pathophysiology I	4	I	238273	1W
Clinical kinesiology I	5	I	238275	1W
Psychological human development	2	I	238286	1W
English	2	I	289805	1W
German	2	I	289807	1 W
Physiotherapy in Orthopedics	4	I	120722	3 W
Physical Factors in Therapy	4	I	251948	3W
Basics of Physiotherapeutic Exercise and Manual Therapy	7	I	251949	3W
Communication Skills	2	I	251953	3W
Research Methods in Physiotherapy I	3	I	268003	5W
Physiotherapy in Pediatrics	3	I	268005	5W
Clinical Practice III	8	P	268006	5W
Anatomy With Histology II	3	I	289804	2 S
Physics II	2	I	238279	2 S
Physiology with Pathophysiology II	2	I	238280	2 S
Clinical kinesiology II	4	I	238282	2 S
Hygiene and Social Medicine	2	I	238289	2 S
Clinical Training I	5	P	238293	2 S
Gerontology	2	I	238292	2 S
Informatics	2	I	78743	2 S

Rheumatology	3	I	251956	4 S
Gynecology with Obstetrics	3	I	251957	4 S
Psychiatry and Neurology	3	I	251958	4 S
Physiotherapy in Traumatology	4	I	120723	4 S
Physiotherapy I	4	I	251954	4 S
Clinical Training II	7	P	251959	4 S
Research Methods in Physiotherapy II	3	I	268009	6 S
Physiotherapy in Gynecology	2	I	268010	6 S
Clinical Practice IV	6	P	268012	6 S
Final Paper	10	I	268013	6 S

*Explanation of Teaching Methods for Long-Term Student Mobility (Studies)

(for use in the course catalogue from which Learning Agreement information is entered)

T – Theoretical Consultative (course delivered in English)

- **Description:**
  Individual or group consultative teaching conducted in English, intended exclusively for incoming international students. Consultative lectures focus on providing explanations and guidance regarding theoretical content.
- **Content:**
  Primarily theoretical lectures and discussions with the professor, with the possibility of written and/or oral assignments.
- **Note:**
  No regular classes with local students. It is possible to choose courses offered in all semesters. The format and schedule are flexible and based on individual arrangements with the course instructor.

  The mobility period may be shorter than the full semester (e.g., 3 months), but **must** include the **examination period**. Therefore, a later arrival than the official semester start is acceptable, but the student must stay through to the end of the semester, including exams.

I – Integrated (course taught in Croatian with additional explanation in English)

- **Description:**
  Participation in regular classes with local students, taught in Croatian, with additional explanations provided in English when necessary. This includes academic lectures and exercises.
- **Content:**
  Theoretical lectures or a combination of lectures and practical exercises. Students may complete assignments and projects in English.
- **Note:**
  Classes are held according to the regular timetable during the semester in which the mobility takes place. A higher level of independence and readiness to follow content in Croatian is required, with support from the lecturer.
- **Language preparation:**
  Croatian – minimum recommended level: **A2**
  Language support is available online via EU Academy:
  Learn Croatian with OLS
- **Mobility duration:**
  Full semester – includes both teaching period and examination period.

P – Practical (practical training)

- **Description:**
  Practical work or exercises only, such as laboratory work, professional placements, or fieldwork.
  May include: practical training, practical exercises and activities, work placement, or field practice.
- **Content:**
  Active participation in practical activities, with basic guidance provided in the agreed language (Croatian or English, as specified in the Learning Agreement). Placements may occur outside the institution, in partner organizations or external training facilities.
- **Format:**
  Offered as a structured programme or arranged individually upon request.
- **Note:**
  Practical work is carried out according to a previously agreed schedule. Communication with mentors, task execution, and reporting are conducted in English.
- **Mobility duration:**
  To be determined based on individual arrangements.

Important:

All listed models represent different formats of teaching during mobility. However, **student workload (ECTS credits) and mobility duration** are fully aligned with **validated syllabi**

and official curricula. This ensures that the structure and intensity of learning activities follow formal academic standards, enabling the transparent recognition of learning outcomes in line with **Erasmus+ and ECTS guidelines**.

CONTACT INFORMATION

ECTS COORDINATORS/ the host of the department:

Dr. sc. Slavica Janković, college professor

slavica.jankovic@vevu.hr

ECTS Coordinator – The person responsible for coordinating the SMS mobility program. This includes approving proposed SMS Mobility Plans for incoming students, as well as approving Learning Agreements and any course modifications during the mobility period.

INCOMING TRAINEEHIP STUDENTS' SUPERVISORS/the host of the department:

Vesna Šeper, Ph. D. in Physical Education and Sport, college professor vesna.seper@vevu.hr

Supervisor – The person responsible for coordinating the SMT mobility program. This includes approving proposed SMT Mobility Plans for incoming students, as well as approving Learning Agreements and any traineeship modifications during the mobility period.

LIST OF LECTURERS **LINK.**

CLASS DESCRIPTION AND LEARNING OUTCOMES ON THE CLASS LEVEL

Semestre One

Course name	**Anatomy with histology I**
Prerequisites for enrolling in class for enrolling in class	
Expected learning outcomes of the course	
After successfully completing the course, students will be able to: 1. Integrate the knowledge acquired in the course with clinical disciplines, 2. To present the macro- and micromorphology of the human body, 3. Review the adequacy of the range of motion of individual joints, 4. Classify the components of the human body.	
Contents of the course	
Contents of the course is as follows: 1. Introductory lecture 2. Introduction to osteology 3. Bones of the neurocranium 4. Bones of the viscerocranium 5. Trunk bones 6. Bones of the upper limb 7. Bones of the lower limb 8. Introduction to syndesmology, 9. Joints of the head 10. Trunk joints 11. Joints of the upper limb 12. Joints of the lower limb	

Course name	**Biomechanics**
Prerequisites for enrolling in class for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Recognize the basic laws of biomechanics,
2. Assess biomechanical parameters of body segments,
3. Critically judge the movement,
4. Plan the process of data collection and processing for movement analysis.

Contents of the course

Contents of the course is as follows:

1. Basics of biomechanics and mechanics: laws of classical mechanics, geometric features of the human body, rectilinear and curvilinear motion, rigid body systems, collision and frictional forces
2. Biomechanical properties of the musculoskeletal system, determination of body segment parameters
3. Evaluation of kinematic quantities of motion
4. Kinetic quantities and their measurement: measurement of surface reaction forces, vector diagram
5. Kinesiological electromyography, neuromuscular system: biomechanical properties of muscles, functional electrical stimulation, prostheses and anthropomorphic robotics
6. Biomechanical diagnosis of movement
7. Body weight, weight of body segments and force of gravity, movement and analysis of movement through joints, equilibrium, use of support base and different surfaces for analysis of body movement
8. Determination of inertia parameters, stereophotogrammetric registration of motion, measurement of forces using a platform for measuring force components, procedures for collecting EMG signals in kinesiological electromyography

Course name	Physics I
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Formulate basic physical laws and apply them in biological systems and devices used in physiotherapy,
2. Describe the ways of transferring energy and matter within the organism and conclude about its interaction with the environment,
3. Recognize and define the role of forces and levers, analyse the effect of force on the human body,
4. Formulate the basic laws of hydrodynamics and analyse their application to the human body,
5. Apply the acquired knowledge in the field of physics in practice and continue to expand their knowledge in this field independently.

Contents of the course

Contents of the course is as follows:

1. Physical quantities and units
2. Mechanics of a rigid body
3. Force, moment of force
4. Levers in therapy
5. Elastic deformations, elastic properties of bone, blood vessels and muscles
6. Mechanics of liquids and gases
7. Hydrostatics
8. Ideal gas laws
9. Phenomena related to tension
10. Viscous properties
11. Diffusion
12. Acoustics and ultrasound
13. Thermodynamics of a biological system

Course name	**Basics of health care**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Analyse the principles, measures and levels of health care,
2. Analyse organizational models of health care,
3. Apply knowledge about patient care in bed in a safe and dignified manner,
4. Recommend methods of keeping medical records.

Contents of the course

Contents of the course is as follows:

1. Basics of health care and the process of health care - organization and principles of work
2. History of medicine and nursing
3. Admission, transfer and discharge of patients
4. Basic human needs
5. General infection prevention procedures
6. Vital signs
7. Body secretions
8. Application of medicines
9. Nursing care to maintain the integrity of the skin
10. Nursing care for a patient with cognitive perceptual difficulties
11. Nursing care for the elderly
12. Nursing care for dying patients
13. Nursing documentation
14. Nursing history guide

Course name	Physiology with pathophysiology I
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Explain basic homeostatic mechanisms,
2. To connect physiological disorders with the pathophysiological basis of disease occurrence,
3. Identify basic points in physiological processes for possible intervention by physiotherapists,
4. To acquire the basic skills of measurement and interpretation of the results of the measurement of various physiological parameters.

Contents of the course

1. Homeostasis; cell and cellular processes

2. Skeletal muscle

3. Metabolic processes of the locomotor system with reference to physical activity

4. Motor control: connection between the function of the nervous system and muscle activity

5. Heart muscle

6. Cardiovascular system and its adaptation to physical activity; arterial pressure and short-term i

long-term control of arterial pressure and tissue flow

7. Devices for dosed physical load

8. Assessment of the function of the cardiovascular system, measurement of oxygen intake, assessment of energy consumption

9. Astrand test

10. Pathophysiology; thanatology

11. Regressive processes; progressive processes, degeneration, necrosis, regeneration, disorder pigment metabolism

12. Locomotor system - pathophysiological mechanisms

13. Blood flow disorders; arterial hypertension

Course name	Psychological human development
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to::

1. Integrate knowledge about development, graduation, learning and development factors,
2. Analyse developmental stages in human life and basic features,
3. Assess cognitive, physical and social development in all developmental stages,
4. Classify developmental disorders in different developmental stages,
5. Construct a care plan for the patient in different developmental stages taking into account the specific needs they have in the developmental stage.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. Introduction to human development - development, health and disease
3. Methods of studying human development
4. Development theories
5. Characteristics of certain periods of development
6. Prenatal development and prenatal environment
7. Development in the first year of life
8. Adaptation of a newborn child, growth and development, development of motor skills and perception, cognitive development, personality development and social development
9. Development in early childhood; physical and motor, cognitive, social and personality development
10. Development in middle childhood; physical and motor, cognitive, social and personality development,
11. Development in adolescence; the relationship between physical and psychological development, development of sexual characteristics, motor, cognitive and social development, personality development
12. Psychopathology of the adolescent age
13. Development in young adulthood - physical, cognitive and social development, family, occupation and professional development
14. Development in middle adulthood - physical, cognitive and social development and personality development, mid-life crisis, family and professional changes
15. Development in old age, aging and aging of the nation and individual, theories of aging, changes in abilities, personality and aging, social relations, family, mental health, death and dying, models of social and health care for the elderly.

Course name	Clinical kinesiology I
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Assess deviations from normal movement for each segment of the body individually,
2. Determine the role of individual segments and their importance for the movement as a whole,
3. Connect the position of the muscles with their role in the movement,
4. Design activities that include individual segments of the body in open and closed kinetic chains.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. Kinesiology
3. Spatial orientation
4. Arthrokinematics
5. Arthrokinematics of the shoulder girdle
6. Arthrokinematics elbow, forearm
7. Arthrokinematics of the hands
8. Arthrokinematics of the spine
9. Arthrokinematics hip joint and pelvis
10. Arthrokinematics of the knee joint
11. Foot arthrokinematics
12. Myology
13. Repetition

Course name	**Introduction to physiotherapy**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Define the term physiotherapy and the scope of work of a physiotherapist,
2. Explain the roles of physiotherapists,
3. Define the basic components of the physiotherapy process,
4. Explain the development of physiotherapy in our country and in the world in the modern context,
5. Recognize the types of organizational units of physiotherapy,
6. Analyse models of team cooperation.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. History of physiotherapy in the Republic of Croatia and in the world
3. Definition of physiotherapy
4. Scope of work of a physiotherapist
5. Terminological guidelines in physiotherapy
6. Physiotherapy process
7. Levels of organizing physiotherapy
8. Team cooperation in physiotherapy
9. World Confederation of Physiotherapy (WCPT)
10. European Region of Physiotherapy (ER-WCPT)
11. Models of teamwork in physiotherapy
12. Physiotherapy standards
13. Education in physiotherapy
14. Professional associations
15. Research in physiotherapy

Course name	Basics of motor transformations I
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Understand and perform motor testing,
2. Analyse the results of motor testing with the creation of a transformation process program,
3. Interpret and define the plan and program of the transformation process based on the results of motor skills testing,
4. Evaluate and explain the application of the transformation process in persons with reduced ability to perform normal movement,
5. Critically judge the importance and role of physical exercise for the normal development of an individual,
6. Create a plan and program of the transformation process.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. Realization of transformational processes under the influence of the targeted motor structure
3. Activities
4. Motor stereotypes of movement
5. Introduction to kinesiological methodology
6. Introduction to training theory
7. Organizational forms of work
8. Work methods
9. Doping
10. Creating an exercise program
11. Analysis of sports activities and classification of sports
12. Fundamentals of motor skills training methodology i
13. technical tactical training
14. Basics of recreational medicine, fatigue and overtraining
15. Aerobic training
16. Anaerobic training
17. Training and sports form

Course name	**English**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. connect language knowledge and skills (understanding, listening, speaking and writing),
2. present the ability to think by drawing conclusions and formulating a personal opinion in English as a foreign language,
3. combine professional terminology in speech and writing (communication skills),
4. lead and formulate verbal presentations and professional dialogues in English,
5. connect basic English grammar and syntax in the profession,
6. independently judge professional literature in English.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. The tenses (Present Sample, Present Continuous, Past Simple Past Continuous, Present Perfect, Past Perfect, Future)
3. The Passive Voice
4. Regular/ Irregular verbs
5. Modals
6. What is Physical Therapy?
7. Levels of Structural Organization in the Human Body
8. The 5 Senses
9. The Nervous System: Facts, Function and Diseases
10. The Human Musculoskeletal System
11. The Respiratory System
12. The Cardiovascular System

Course name	**German**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Valorise professional texts in German,
2. Recognize medical vocabulary within the framework of what was learned during the semester,
3. Lead a conversation using verb tenses correctly,
4. Correctly combine modal verbs in the German language of the medical profession,
5. Recognize the reaction of verbs in the German language of the medical profession.

Contents of the course

Contents of the course is as follows:

1. Einführungsstunde
2. Grundwortschatz des Sachgebiets Physiotherapie
3. Krankheiten gestern und heute
4. Infektionskrankheiten (ansteckende Krankheiten)
5. Massage
6. Medikamente
7. Rauschmittel
8. Knochenbruch
9. Kolloqium
10. Zeitformen
11. Wiederholen der Zeitformen
12. Rektion der Verben
13. Modalverben
14. FVG
15. Wiederholen

Second semester

Course name	**Anatomy with histology II**
Prerequisites for enrolling in class	
Expected learning outcomes of the course	
After successfully completing the course, students will be able to: 1. Integrate the knowledge acquired in the course with clinical disciplines, 2. Present the macro- and micromorphology of the human body, 3. Review the adequacy of the range of motion of individual joints, 4. Classify the components of the human body.	
Contents of the course	
Contents of the course is as follows: 1. Introductory lecture 2. Introduction to myology 3. Head muscles 4. Trunk muscles 5. Muscles of the upper limb 6. Muscles of the lower limb 7. Introduction to histology 8. Histology of connective tissue 9. Histology of muscle tissue 10. Histology of cartilage and bone 11. Histology of peripheral blood 12. Histology of organic systems 13. Skin histology 14. Anatomy of the nervous system 15. Anatomy of organic systems	

Course name	Physics II
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Formulate basic physical laws and apply them in biological systems and devices used in physiotherapy,
2. Recognize and explain electrochemical phenomena and physiological action of electric current,
3. Recognize, describe and compare electrotherapy methods and the equipment and devices used for this,
4. Apply acquired knowledge in the field of physics in practice and independently continue to expand your knowledge in the said field,
5. Measure physical quantities during physical processes and interpret the results.

Contents of the course

Contents of the course is as follows:

1. Physical quantities and units. Introductory lecture for laboratory exercises. Analysis of measured data
2. Basics of electricity
3. Magnetism
4. Electricity at rest
5. Electricity in motion
6. Electromagnetism
7. Alternating currents
8. Electrochemical phenomena
9. Physiological effects of electric current
10. Basic electronic elements and circuits
11. Generators of different pulses; basic devices in electrotherapy; electrotherapy methods
12. Effects of electric current and protection

Course name	Physiology with pathophysiology II
Prerequisites for enrolling in class	

Conditions for enrolling in class

No conditions.

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Describe the physiological functions of the organism by system,
2. Explain physiological reactions after physical activity, to fatigue, overtraining and other changed physiological conditions,
3. Interpret pathophysiological disorders in the context of the physiotherapist's role in treatment,
4. To acquire the basic skills of measurement and interpretation of the results of the measurement of various physiological parameters.

Contents of the course

Contents of the course is as follows:

1. Respiratory system and its adaptation to physical activity
2. Renal system
3. Endocrine system
4. Digestive system
5. Adaptations to heat and cold
6. Fatigue and overtraining
7. Assessment in kinesiology physiology
8. Pathophysiology of respiratory system diseases
9. disorders of body fluids; pathophysiology of kidney diseases, metabolism and genetics
10. The basis of immune processes
11. Inflammation and regeneration
12. Pathophysiological mechanisms of endocrine diseases and diseases of the digestive system
13. Dynamometry, celerimetry, assessment of flexibility
14. Spirometry, minute breathing volume

Course name	Health psychology
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Critically assess the impact of mental state on health,
2. Recommend the possibilities of access to the patient depending on what type of reaction the individual patient has and adapt your reaction to his personality type,
3. Integrate knowledge about psychological support for patients with different diseases and conditions, especially for people with physical disabilities,
4. Describe the stress in the patient and the family and alleviate the effect of stress on the patient's overall condition,
5. Analyse signs of burnout syndrome and prevent further progression of the disorder in oneself or other team members.

Contents of the course

Contents of the course is as follows:

1. Definition of health psychology
2. Possibilities of applying psychological knowledge and skills in health preservation, diagnostics, treatment of diseases and rehabilitation
3. The role of health psychology in increasing the efficiency of health practice and saving health resources
4. Contemporary integrated bio-sociopsychological approaches in healthcare
5. Forms of health behaviour and health counselling
6. The influence of psychological conditions on the occurrence of physical diseases, psychological stress and diseases
7. Ways to suppress the effects of stress on health
8. Mental reactions to physical diseases
9. Problems of psychological adaptation to hospital stay
10. Ways to relieve fear and anxiety during illness
11. Psychological reactions to severe injuries
12. Psychological problems of disabled people and ways of adaptation to disability
13. Psychological mechanisms of pain, psychological factors affecting pain and psychological methods of pain therapy
14. Psychological problems of dying patients

Course name	**Clinical kinesiology II**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Analyse the posture status,
2. Assess the motor function of a person,
3. Draw a conclusion about the COURSE's condition,
4. Choose the necessary activities to improve possible deviations from normal postural relationships and movement patterns.

Contents of the course

Contents of the course is as follows:

1. Kinesiological analysis of the spine
2. Kinesiological analysis of the shoulder girdle
3. Kinesiological analysis of elbow and forearm
4. Kinesiological analysis of the hand
5. Kinesiological analysis of the pelvis
6. Kinesiological analysis of the hip joint
7. Kinesiological analysis of the knee joint
8. Kinesiological analysis of the foot joint
9. Kinesiological gait analysis
10. Kinesiological analysis of breathing
11. Kinesiological analysis of posture
12. Kinesiological analysis of transfer

Course name	Hygiene and social medicine
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Participate in teamwork according to the rules of the profession,
2. Recommend physiotherapy procedures within the framework of secondary and tertiary prevention and physiotherapy assessment,
3. Argument the opinion about the effectiveness of such physiotherapy procedures,
4. Value the importance of teamwork and evidence-based professional monitoring,
5. Use public health indicators in your professional work,
6. Monitor the maintenance of hygiene in the workplace, and point out possible omissions and propose measures for their elimination,
7. Recognize the use of poor nutrition in their patients,
8. Suggest the use of proper nutrition to their patients.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. Social medicine: definition, historical development, health-definitions, factors affecting health
3. "Health for all", health needs and health requirements, health status of the population
4. Demographic characteristics and health needs, population policy, social needs and social protection, improvement of health, self-protection and co-protection
5. Health care and levels of health care
6. Health policy and goals of health care
7. Vulnerable groups and risk factors
8. The influence of the environment on health; water - water in health protection
9. The influence of the environment on health; nutrition - nutrition in health protection
10. Space hygiene in healthcare institutions
11. Hospital infections and their most common causes
12. Screening method - where, when and how we use it
13. Croatian public health national programs

Course name	**Physiotherapy assessment**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Value the importance of teamwork and evidence-based professional monitoring,
2. Assess the importance of assessment as a basis for planning physiotherapy procedures,
3. Valorise the method of implementing the methods of COURSEive and objective examination in physiotherapy,
4. To justify the basic practical skills of implementing measurement procedures in physiotherapy,
5. Critically assess the therapeutic goals and evaluate the justification of the physiotherapy intervention plan,
6. Argument the conclusions of the assessment through the analysis of the collected data.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. The purpose of assessment in physiotherapy
3. COURSEive review
4. Objective examination
5. Anamnesis, observation, palpation
6. Measurement procedures and tests in physiotherapy
7. Anthropometric measurements, measurement of aerobic capacity and endurance, assessment of joint integrity and mobility
8. Range of motion measures; measures of muscle strength - manual muscle test, dynamometry
9. Assessment of posture
10. Assessment of pain
11. Assessment of activities of daily living
12. Assessment of gait, locomotion and balance
13. Ergonomic and biomechanical assessment

Course name	Basics of motor transformations II
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Understand and perform motor testing,
2. Analyse the results of motor testing with the creation of a transformation process program,
3. Interpret and define the plan and program of the transformation process based on the results of motor skills testing,
4. Evaluate and explain the application of the transformation process in persons with reduced ability to perform normal movement,
5. Critically judge the importance and role of physical exercise for the normal development of an individual,
6. Create a plan and program of the transformation process.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. Coordination and flexibility
3. Strength and speed
4. Precision and balance
5. Analysis of athlete's dimensions
6. Training of athletes
7. Principles and rules of sports training
8. Organizational forms of work
9. Methodical organizational forms of work
10. Work in cells and circular form of work
11. Work on the track and obstacle course
12. Factor structure of sport
13. Specification equation
14. Management of sports form

Course name	**Clinical Training I**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. To present the scope of work and the role of a physiotherapist in modern physiotherapy,
2. Evaluate the types of organization of physiotherapy activities in the clinical environment and the level of health care,
3. Choose the most adequate method of physiotherapy intervention and treatment,
4. Design a physiotherapy program respecting the indications, contraindications and individual needs of the patient,
5. Critically evaluate the usefulness of applying different modalities of physiotherapy,
6. Evaluate the patient's rehabilitation process,
7. Evaluate the effects of selected methods of physiotherapy intervention and treatment using appropriate outcome measures.

Contents of the course

Contents of the course is as follows:

1. Introduction to physiotherapy: scope of work of physiotherapists and role of physiotherapists in modern physiotherapy; physiotherapy approaches and their differences
2. Team cooperation and preconditions for teamwork; models of team cooperation
3. Types of organization of physiotherapy units
4. The role of research in physiotherapy
5. Physiotherapy assessment: COURSEive examination, history, observation, palpation
6. Measurement procedures and tests in physiotherapy
7. Anthropometric measurements, measurement of aerobic capacity and endurance, assessment of joint integrity and mobility, range of motion measurements; muscle strength measurements - manual muscle test, dynamometry, isometric and isokinetic muscle strength testing
8. Assessment of posture; pain assessment; assessment of skin integrity, assessment of reflex activity
9. Assessment of activities of daily living and instrumental activities of daily living
10. Assessment of gait, locomotion and balance; ergonomic and biomechanical assessment; assessment of the use of assistive and adaptive devices
11. Specific physiotherapy methods and assessment systems
12. Documenting and interpreting the assessment results, and using them in the planning of physiotherapy intervention

Course name	Informatics
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Valorise the needs of healthcare for the optimal form of ICT solutions,
2. Compare the differences, risks and advantages in data storage used in healthcare institutions (databases, document structures, online, offline solutions),
3. Critically judge the entire technological base of information and communication technology,
4. Choose the possibilities of using applications in the cloud for the environment of health institutions,
5. Evaluate the entity's web site based on technical parameters.

Contents of the course

Contents of the course is as follows:

1. Information technology in healthcare. Definitions and content. Brief history and trends of development and information technology. Information technology as a strategic resource
2. Computer system. Data and information. Computer system components and subsystems Hardware. Software. People. Organization. Communication. Types of computer systems
3. Computer networks and mobile devices. Remote connection of different business locations, network types and structures
4. Basic forms of computer application with special reference to work with text, databases, support in research and learning
5. System software. Operating systems. Utilities and utilities
6. Information and communication technology in business. Business in the cloud, advantages and disadvantages
7. Open-source solutions, licensing and the importance of legal software in business. Information and communication technology costs
8. Information systems. Data organization and management. Files. Database
9. Network (web) solutions, pages and applications. Progressive web applications, SEO elements, Google tools for the successful functioning of the network solution
10. Application of informatics in the improvement of health care with special reference to health information systems
11. Security aspects of ICT use

Course name	Gerontology
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. To recommend the best treatment for an elderly person,

2. Recognize sensory, motor and intellectual deficiencies,

3. Critically evaluate the symptoms of diseases characteristic of old age,

4. Apply appropriate therapeutic procedures in the treatment of the elderly in an age-appropriate manner,
5. Recommend preventive action in the community or a specific institution with the aim of preventing the onset of disease or alleviating symptoms.

Contents of the course

Contents of the course are as follows:

1. Introductory lecture
2. Definition of gerontology; population aging: aging criteria, demographic changes in certain groups of countries
3. The impact of population aging on the functioning of the state and the health system
4. Basics of communication skills with elderly patients, communication with special groups of patients (impaired hearing or sight)
5. Theory of aging; cognitive functions and aging; aging and society
6. Atherosclerosis and the resulting disorders and diseases of the elderly, diseases of the heart and circulatory system in old age
7. Endocrine disorders of old age
8. Models of care for the elderly
9. Neurological disorders in old age
10. Psychiatric disorders in old age
11. Sensory disorders in old age
12. Health behaviour in old age

Course name	Management in healthcare
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Apply knowledge related to the organization of health systems,

2. Assess the quality of service in a health facility,

3. Evaluate the importance of communication skills in working with patients and healthcare professionals,
4. Critically assess the management of human resources.

Contents of the course

Contents of the course are as follows:

1. Introductory lecture
2. Health systems
3. Legal framework in healthcare
4. Financing of the health care system
5. Computer literacy
6. IT systems in healthcare
7. Marketing in healthcare
8. Human resources management
9. Public health management - health management
10. Quality standards in healthcare
11. Management of crisis situations in healthcare
12. The importance of communication skills in healthcare
13. Ethics and bioethics

Semestre Three

Course name	Physiotherapy in orthopaedics
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Assess the condition of the musculoskeletal structures and functions and the etiology of disorders of the musculoskeletal system within the framework of the physiotherapy assessment of orthopaedic patients,

2. Choose physiotherapy procedures and protocols based on physiotherapy assessment, recent literature and evidence-based practice,

3. Reorganize the rehabilitation protocol according to the individual characteristics and condition of the patient,

4. Valorise the effects of implemented rehabilitation procedures in accordance with evidence-based practice and medical ethics and deontology,

5. Recommend methods of maintaining the achieved functional status and primary and secondary prevention through patient education.

Contents of the course

Contents of the course are as follows:

1. Etiology of basic orthopaedic disorders (inflammatory, biomechanical, congenital, infectious, tumour, etc.)
2. Physiotherapy assessment, intervention and evaluation procedures in the primary and secondary prevention of disorders of the musculoskeletal system
3. Physiotherapy procedures for operative and non-operative treatment of orthopaedic diseases
4. Physiotherapy assessment and intervention procedures for fractures
5. Physiotherapy assessment and intervention procedures for overexertion syndrome
6. Physiotherapy assessment, intervention and evaluation procedures for disorders of the muscular, joint and ligamentous system (ruptures, dislocations).
7. Physiotherapy assessment, intervention and evaluation procedures in the postoperative rehabilitation of the patient/application and adaptation of the rehabilitation protocol
8. Physiotherapy procedures for osteosynthesis and joint implants/application and adaptation of the rehabilitation protocol
9. Postoperative physiotherapy for the musculoskeletal system
10. The use of orthoses and prostheses and the use of electronic aids and aids in the activities of the patient's daily life
11. Physiotherapy assessment and intervention procedures for the most common congenital disorders of the musculoskeletal system
12. Physiotherapy assessment and intervention procedures for the most common malignant conditions of the musculoskeletal system

13. The importance of physiotherapists in patient education and their role in the interdisciplinary team

Course name	**Physical factors in therapy**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Assess the benefits of using physical factors in physiotherapy,

2. Determine the need and effects of the use of physical factors in therapy,

3. Determine indications and contraindications for the use of physical factors in therapy,

4. Participate in the application of electrodiagnostic procedures, electrotherapy procedures, thermotherapy, ultrasound therapy, light therapy, paraffin therapy, magnetotherapy, hydrotherapy, cryotherapy and laser therapy,

5. Argument the opinion about the effectiveness of the application of physiotherapy factors.

Contents of the course

Contents of the course are as follows:

1. Introductory lecture
2. Physical factors in physiotherapy: definition and role in physical medicine and rehabilitation
3. Electrodiagnostic procedures that precede the application of physiotherapy
4. Electrotherapy, electrostimulation
5. Thermotherapy and thermodiagnosis, cryotherapy
6. Ultrasound therapy
7. Light therapy
8. Paraffinotherapy, basics of balneology and climatology
9. Magnetotherapy
10. Hydrotherapy
11. Laser therapy
12. Principles of symptomatic and causal treatment

Course name	Basics of physiotherapy exercises and manual therapy
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Choose the most adequate method of physiotherapy exercises, massage techniques, lymphatic drainage, mobilization techniques and respiratory therapy according to the individual needs of the user/patient,

2. Critically evaluate the usefulness of applying different forms of physiotherapy exercises within the framework of the physiotherapy process, as well as their indications and contraindications,

3. Recommend physiotherapy procedures of manual techniques based on indications and contraindications,

4. To judge the opinion about the program of physiotherapy exercises and the effectiveness of the procedures of manual techniques,

5. To determine the effects of physiotherapy exercise programs and manual techniques in physiotherapy treatment using appropriate outcome measures.

Contents of the course

Contents of the course are as follows:

1. Introductory lecture
2. Principles and procedures of applying manual therapy techniques in order to reduce pain, increase range of motion, and reduce or remove soft tissue swelling, inflammation or restrictions
3. Implementation of various manual therapy techniques, including therapeutic massage
4. Implementation of different techniques of manual therapy including massage of connective tissue, acupressure massage and massage of reflex zones on the foot
5. Implementation of manual therapy techniques including manual lymphatic drainage
6. Implementation of various techniques of manual therapy including manual traction, mobilization and manipulation of joints, mobilization and manipulation of soft tissue
7. Principles and procedures of application of motor control and motor learning, motor development and motor safety
8. Principles and procedures of application of therapeutic exercise and functional training
9. Carrying out aerobic endurance activities using ergometers, steppers, weights, pulleys, hydraulics, elastic bands, robotics, mechanical or electromechanical aids
10. Conducting exercise in water
11. Achieving relaxation; improving the elasticity of contractile and non-contractile tissue; improving the function of the pulmonary system
12. Principles and procedures of respiratory therapy application including breathing techniques, mechanism of expectoration, mobilization and transport of secretions, drainage positions, relaxation methods, mobilization of the thorax, respiratory training and inhalations

Course name	Orthopaedics and surgery
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After taking the course, students will be able to:

1. Assess the importance of diagnostics in the care of orthopaedic and surgical patients with physiotherapy, classify emergency situations in surgery,

2. Critically assess the appropriate use of orthopaedic aids in the rehabilitation of orthopaedic and surgical patients,

3. To determine the effectiveness of rehabilitation procedures in the treatment of patients after tumour operations.

Contents of the course

Contents of the course are as follows:

1. History of orthopaedics, basics of diagnostics in orthopaedics, orthopaedic procedures (non-operative and operative)
2. General disorders of the bone and joint system, bone dysplasia
3. Multiple congenital contractures
4. Metabolic and hormonal diseases (osteoporosis, rickets and osteomalacia, gout). Juvenile osteochondrosis.
5. Inflammatory diseases of the bone and joint system (osteomyelitis, arthritis, rheumatoid arthritis).
6. Degenerative joint diseases
7. Tumours of the bone and joint system
8. Special part: congenital and acquired diseases by body segments (neck, spine and pelvis, chest, shoulder and upper arm, elbow and forearm, wrist and hand, hip and upper leg, knee and lower leg, ankle and foot).
9. Orthopaedic aids
10. Basic principles of work in surgery: asepsis, antisepsis, sterilization, types of operations and division according to denomination and regions, response of the organism to injury
11. Craniocerebral injuries, types of neurosurgical operations; thoracic and cardiovascular surgery: injuries of the chest, surgical diseases of the chest, types of surgery in the chest; abdominal surgery and urology

Course name	Internal medicine
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Assess the importance of acquiring knowledge about diseases of internal organs in future work,

2. Integrate and interconnect facts and knowledge about diseases of internal organs,

3. Critically judge the influence of the most common diseases of internal organs on the physiotherapy process,

4. Predict the course of physiotherapy in patients with the most common diseases of internal organs.

Contents of the course

Contents of the course are as follows:

1. Internal medicine: yesterday, today, tomorrow
2. Clinical approach to the internist patient
3. Diagnostic procedures in internal medicine
4. Diseases of the heart and blood vessels
5. Diseases of the organs of the respiratory system
6. Intensive treatment of internal medicine patients
7. Diseases of organs of the digestive system
8. Kidney and urinary tract diseases
9. Diseases of the blood and blood-forming organs
10. Diseases of glands with internal excretion
11. Diabetes and other metabolic disorders
12. Immunological, allergic and rheumatologically diseases

Course name	Communication skills
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Evaluate the key terms of communication management, its specificities in relation to other management functions in the organization and the role of social media in the management of all stakeholder relations,

2. Support the use of communication management tools, especially reputation management through the identity, culture and image of the organization, especially in the context of healthcare management,

3. Support the improvement of understanding of the role and importance of communication management in the overall operation of the organization and the role of social media in creating relations with stakeholders and developing stakeholder relations with an emphasis on communication in healthcare,

4. Create strategic and operational communication plans as part of overall management and key strategic managerial functions in healthcare.

Contents of the course

Contents of the course are as follows:

1. Introductory lecture - familiarization with the COURSE and method of work
2. Verbal and non-verbal communication - contemporary public speaking
3. Written communication skills
4. Presentation skills and personal communication
5. Individual communicators in the communication process
6. Communication in healthcare
7. Communication between physiotherapist and patient - advice, instructions, education
8. Significance of e-communication in healthcare
9. The importance of public relations in healthcare
10. New media and social media
11. Strategic planning and leadership
12. Systematization of material through case analysis from practice

Fourth Semester

Course name	**Physiotherapy in traumatology**
Prerequisites for enrolling in class	
Expected learning outcomes of the course	
After successfully completing the course, students will be able to: 1. Assess the patient's condition as part of the physiotherapy assessment of traumatological and polytraumatic patients, 2. Choose physiotherapy procedures and protocols based on the physiotherapy assessment and established rehabilitation priorities in preventing early and late complications on the musculoskeletal and other organ systems, 3. Reorganize the rehabilitation protocol according to the individual characteristics and condition of the patient, 4. Valorise the effects of implemented rehabilitation procedures in accordance with evidence-based practice and medical ethics and deontology.	
Contents of the course	
Contents of the course are as follows: 1. Physiotherapy procedures for the assessment of structures and associated functions after trauma 2. Physiotherapy process in operative and non-operative treatment of trauma patients 3. Physiotherapy process in a polytraumatic patient 4. Determining rehabilitation priorities in order to prevent early and late complications in trauma patients 5. Physiotherapy assessment, intervention and evaluation procedures in postoperative rehabilitation of trauma patients - inpatient and outpatient phase 6. Physiotherapy process for sprains, ruptures, fractures and nerve paresis/application and adaptation of the rehabilitation protocol 7. Physiotherapy process in osteosynthesis and application of joint implants/application and adaptation of the rehabilitation protocol 8. Treatment of the ball of the hand and leg with bandaging 9. Pre-prosthetic phase of the ball of the arm and leg and application of walking exercises and hand function with aids after amputations 10. Application of orthoses and prostheses in the activities of the patient's daily life 11. Physiotherapy approach in the assessment of treatment of the most common musculoskeletal and circulatory complications in trauma patients (Mb Sudeck, Compartment syndrome, Wolkman's ischemic contracture, thrombosis, lymphedema). 12. The importance of the physiotherapist in the education of the patient in preserving and improving the functional status achieved on an inpatient or outpatient basis 13. The role of the physiotherapist in the interdisciplinary team	

Course name	Physiotherapy I
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. To carry out a physiotherapy process for people with disorders and diseases of the cardiovascular and respiratory system, and for people suffering from and treated for tumour diseases,

2. Critically evaluate the specifics of different models of physiotherapy for people with disorders and diseases of the cardiovascular and respiratory systems, and for people suffering from and treated for tumour diseases,

3. Apply physiotherapy procedures in the prevention and treatment of diseases and disorders of the cardiovascular and respiratory systems,

4. Apply physiotherapy procedures to prevent the consequences of the treatment of tumour diseases,

5. Critically analyse the effects of the physiotherapy process in people with disorders and diseases of the cardiovascular and respiratory systems, and in people suffering from and treated for tumour diseases.

Contents of the course

Contents of the course are as follows:

1. Introductory lecture
2. Specifics of physiotherapy assessment in persons with disorders and diseases of the cardiovascular and respiratory system
3. Specifics of physiotherapy examination and treatment in persons with acute cardiac conditions, in persons with the consequences of ischemic heart disease and chronic diseases of the cardiovascular system
4. Specifics of physiotherapy examination and treatment in the intensive care unit and after cardiac surgery: implantation of pacemaker, heart bypass and after heart transplantation
5. Specifics of physiotherapy examination and treatment in persons with obstructive lung diseases: COPD, asthma, exudative pleuritis, cystic fibrosis; and in people with restrictive lung diseases: fibrosis and atelectasis
6. Specifics of physiotherapy examination and treatment in persons with dysfunction of the respiratory system as a consequence of neuromuscular diseases
7. Specifics of physiotherapy examination, assessment and treatment in persons suffering from and being treated for head and neck tumour diseases
8. Specifics of physiotherapy examination, assessment and treatment in persons after surgical treatment of breast tumours
9. Specifics of physiotherapy examination, assessment and treatment in persons suffering from and treated for tumours of the digestive and reproductive system
10. Specifics of physiotherapy examination, assessment and treatment for childhood tumours

Course name	Basics of movement rehabilitation
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Assess the state of the basic functional patterns of movement and structure in the frame, physiotherapy assessment in specific conditions and diseases including various post-operative protocols,

2. Determine the goals of physiotherapy treatment for specific conditions and diseases, including various post-operative protocols,

3. Choose the most adequate therapeutic options based on the assessment of function and structure and the established goal of physiotherapy treatment,

4. Critically judge the effects of performed physiotherapy procedures through tests and measurements in specific conditions and diseases, including various post-operative protocols,

5. Argue an opinion regarding the reasons and methods of applying a certain physiotherapy assessment as well as certain physiotherapy procedures in specific conditions and diseases, including different post-operative protocols,

6. Defend the position related to the reason and method of application of certain physiotherapy assessment as well as certain physiotherapy procedures in specific conditions and diseases, including various post-operative protocols.

Contents of the course

Contents of the course are as follows:

1. Introductory lecture
2. Principles and procedures of application of therapeutic exercise within the framework of the physiotherapy process
3. Activities to increase range of motion
4. Activities to increase strength - increase strength through active movement, actively assisted movement and resistance movement
5. Activities to increase stamina
6. Activities to improve posture
7. Stretching exercises
8. Exercises on the therapy ball
9. Breathing exercises and muscles involved in breathing
10. Gait, locomotion, balance, coordination and proprioception training
11. Ergonomic training
12. Principles and procedures of application of functional training of self-care and household care within the framework of the physiotherapy process, including activities of daily life and instrumental activities of daily life
13. Principles and procedures for the use of aids, orthoses, adaptive, protective, supporting means and equipment
14. Physiotherapy procedures for different postoperative protocols

Course name	Rheumatology
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After taking the course, students will be able to:

1. Determine the possibilities of conducting physiotherapy procedures based on the clinical picture of symptoms in people with rheumatic diseases,

2. Choose the best rehabilitation plan for people with rheumatologically problems,

3. To compare the initial and final results of the effect of physiotherapy,
4. To evaluate the effect of aids on the quality of life of people with rheumatic diseases.

Contents of the course

Contents of the course are as follows:

1. Introductory lecture
2. Diagnostic methods in rheumatology
3. Features of autoimmune diseases and systemic connective tissue diseases
4. Rheumatoid arthritis
5. Juvenile chronic arthritis
6. Psoriatic arthritis
7. Reiter's disease
8. Ankylosing spondylitis
9. Degenerative joint diseases
10. Degenerative diseases of the spine
11. Extra-articular rheumatism
12. Metabolic diseases of bones and joints

Course name	Paediatrics with oncology
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After taking the course, students will be able to:

1. To judge possible deviations from the normal development of the child,

2. Classify tumours in childhood,

3. Recommend appropriate physiotherapy treatment for children with problems in normal development,

4. Critically assess the effectiveness of certain diagnostic procedures and rehabilitation treatments in the treatment of paediatric and oncological patients.

Contents of the course

Contents of the course are as follows:

1. Mental development of the child, prenatal, perinatal and postnatal age
2. Psychomotor development of infants, toddler and preschool age
3. Psychology of a sick child; nutrition and nutritional disorders, infectious diseases, diseases of the heart, blood vessels and hematopoietic organs
4. Diseases of the nervous system, neuromuscular and muscle diseases
5. Kidney and urinary tract diseases, behavioural disorders in children
6. Oncology: tumour diseases, risk factors in the development of the disease
7. Epidemiology and classification of tumours
8. Prevention and treatment of tumours
9. Prevention and treatment of the consequences of aggressive methods of tumour treatment on the function and quality of life of patients
10. Characteristics of tumours in adults and childhood tumours

Course name	Gynecology with obstetrics
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After taking the course, students will be able to:

1. Determine the possibilities of conducting physiotherapy procedures based on the clinical picture and symptoms of women with gynecological diseases,

2. Choose the best rehabilitation plan for women after gynecological operations,

3. To compare the initial and final results of the effect of physiotherapy during pregnancy and after gynecological diseases,

4. Assess the musculoskeletal system of the pregnant woman,

5. Choose physiotherapy interventions in the antenatal, natal and postnatal period.

Contents of the course

Contents of the course are as follows:

1. Introductory lecture
2. Diagnostic methods in gynecology and obstetrics
3. Inflammatory diseases of the lower and upper parts of the female genital tract
4. Benign and premalignant diseases of the cervix
5. Microinvasive and invasive cervical cancer
6. Benign uterine diseases; endometrial carcinoma Chori epithelioma
7. Endometriosis
8. Benign ovarian tumours
9. Ovarian cancer
10. Menstrual cycle and menstrual cycle disorders, contraception, sterility, urinary incontinence.
11. Physiology of pregnancy and childbirth; childbearing age; preeclampsia; bleeding in early and late pregnancy;
12. Ectopic pregnancy; abortions; cluster secretory; supervision of the child during childbirth; midwives, midwifery disorders, lactation.

Course name	Psychiatry and neurology
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will acquire the following specific knowledge:

1. Pathophysiologies and diseases of the neurological system and disorders of the motor system,

2. Knowledge of the clinical picture of neurological diseases and description of diagnostic procedures in neurological diseases and disorders and treatment options,

3. Recognition of basic mental disorders and treatment options (affective, neurotic, schizophrenic, addiction disorders),

4. How to recognize basic childhood diseases and treatment options,

5. How to determine the role of physiotherapists in the treatment of these diseases.

Contents of the course

Contents of the course are as follows: Psychiatry:

1. Definition of psychiatry, concept of mental health and mental illness, history and development of psychiatry, contents of the psychiatric profession, activities of the psychiatric profession, organization of psychiatric care and improvement of mental health
2. Psychiatric care (concept, contents and forms)
3. General psychopathology (mental contents)
4. Mental status
5. Organic disorders
6. Addiction disorders
7. Schizophrenic disorders
8. Affective disorders
9. Neurotic disorders
10. Somatomorphic disorders
11. Behavioural disorders, personality disorders
12. Mental retardation
13. Forms of care for certain diseases

Neurology:

1. Basics of neuroanatomy, neurological diagnostics, basics of neurophysiology, consciousness and higher nervous functions
2. Pathophysiology of motor system disorders
3. Syndromes of increased intracranial pressure and meningeal irritation
4. Epilepsy
5. Cerebrovascular diseases
6. Brain and spinal cord tumors
7. Diseases of the extrapyramidal system
8. Neuromuscular and demyelinating diseases
9. Inflammatory diseases of the central and peripheral nervous system
10. Functional headaches
11. Closed craniocerebral injuries,
12. Malformations of the CNS, neurocranium and spinal canal
13. Selected chapters from neuropediatric

Course name	Clinical Training II
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Choose appropriate measurement procedures and tests in assessing the user's condition,
2. Recommend physiotherapy intervention,
3. Anticipate the need for orthopaedic aids,
4. Evaluate the achieved goals of physiotherapy.

Contents of the course

Contents of the course are as follows:

1. Physical factors in therapy
2. Activities to establish, maintain and increase range of motion and flexibility
3. Activities to establish, maintain and increase endurance (muscular, general-aerobic; use of aids)
4. Activities to establish, maintain and increase strength
5. Ball activities
6. Basics of motor control and motor learning, balance and coordination training
7. Respiratory physiotherapy
8. Manual therapy techniques (therapeutic massage, connective tissue massage, manual lymphatic drainage, acupressure massage, manual traction, mobilization and manipulation of joints, mobilization and manipulation of soft tissue
9. Functional training of self-care and household care within the physiotherapy process (education)
10. Application of aids, orthoses, adaptive, protective, supporting means and equipment

Course name	Bioethics
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Describe the concept of bioethics as a philosophical discipline and its historical development, describe and explain the beginnings of medical bioethics and deontology,

2. Describe, explain and apply the principles of physiotherapeutic bioethics,

3. Analyse, present and describe the division of bioethical teachings (virtue ethics, Kant's ethics of duty, Christian virtue ethics, deontological ethics, ethics of care),

4. Analyse, explain and comment on the code of ethics of physiotherapists,

5. Classify, write and take a critical position in various bioethical doubts in physiotherapy practice,

6. Apply the declaration on human rights and the rights of patients, valorise the importance of keeping professional secrecy,

7. Discover and develop the importance of respecting the rights of humans, children and patients.

Contents of the course

Contents of the course are as follows:

1. Development and meaning of ethical thought. (general terms: morality, ethics, golden rule, ethical theories...)
2. International codes of ethics for healthcare professionals. (Hippocrates Oath)
3. The Geneva Oath...)
4. Ethical problems in the relationship between healthcare workers and patients. (medical ethics and bioethics)
5. Bioethical principles, basic ethical principles...)
6. From medical ethics to bioethics (Fritz Jahr, Van Ranselaer Potter, bioethics in Croatia, definition of bioethics, development stages of bioethics)
7. Ethics commissions
8. Codes of ethics and ethical dilemmas - team decision-making
9. Special issues in bioethics. (abortion, euthanasia, cloning, organ transplantation...)
10. Respect for human life and death
11. Special nature of bioethics in physiotherapy. Responsibility for quality and own professional development
12. Ethical dilemmas and ethical decision-making in healthcare teams (problematic situations)

Course name	**Therapeutic horse riding**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:
1. Evaluate the principle of work in various sports-recreational and educational-rehabilitation activities of persons with disabilities in the program of therapeutic riding
2. Analyse the structure of the therapeutic riding lesson with elementary knowledge of the principles of theory and training methodology
3. Critically evaluate the plan and program of occasional and regular forms of sports and recreational exercise for persons with disabilities
4. Apply acquired knowledge in working with neurological patients

Contents of the course

1. Introductory lecture
2. History of the development of the problem of children with developmental disabilities and familiarization with international and domestic Introduction to therapeutic riding, technical and material conditions
3. Therapeutic riding and hippotherapy - indications for therapeutic riding
4. Effects of therapeutic riding. The influence of riding on the interrelationship in the group
5. Special equipment and safety measures in the program of therapeutic riding
6. Developmental disorders as an indication for therapeutic riding
7. Pathological reflexes in neurological diseases; some neurological diseases (Poliomyelitis, mb Parkinson, Epilepsy
8. Theoretical bases of riding therapy for neurological conditions, rheumatic and orthopedic conditions
9. Preparing the horse for the therapeutic riding lesson - leaving the stable with the horse, grooming
10. Warming up the horse, analysis of the individual horse's gait
11. Proper selection of equipment and saddle. Exercises of entering the ramp, into the riding arena and mastering the technique of leading a horse
12. Theme games, relaxation
13. Getting to know the users and their diagnoses and choosing the appropriate equipment for the individual rider
14. Setting individual short-term and long-term goals

Course name	Basics of motor transformations III
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Understand motor stereotypes of movement and energy processes,
2. Analyse the laws according to which motor skills are improved,
3. Assess and explain the need to create a plan and program of the training process,
4. Interpret and define the results from the device for monitoring the transformation process,
5. Critically judge the results obtained by initial, transitive and final checking,
6. Create a seminar paper on the target training process.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. Laws of planning and programming the training process with the use of devices for monitoring the effects of the process
3. Use of the device in practice as a form of rehabilitation and regeneration of the locomotor system
4. Determination of aerobic and anaerobic threshold
5. Heart rate monitoring both during work and during recovery
6. Work with electro muscular stimulators of newer generations
7. Systems for strengthening the musculature tone of individual muscle groups through the creation of an individual work plan and program based on motor tests
8. Working on trainers in fitness
9. Planning and programming of sports training (basics, long-term)
10. Planning and programming of sports training (medium-term, short-term)
11. Terminology of positions and movements
12. Exercises for the development of repetitive strength
13. Exercises for the development of static strength
14. Exercises with dumbbells
15. Exercises for developing flexibility

Course name	**Palliative care**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After taking the course, students will acquire the following specific knowledge and skills:

1. Critically evaluate both the approach and the best way of working with the patient depending on the patient's basic condition,

2. Recommend the approach and the best way of working depending on the place of implementation of palliative care,

3. Integrate knowledge related to team cooperation within palliative care team members,

4. Recommend the most adequate palliative care for a child.

Contents of the course

Contents of the course is as follows:

1. Definition and structure of palliative care
2. Forms and places of implementation
3. Goals and idea of the hospice movement
4. Team structure and team members
5. Procedures and forms of assistance in palliative care units in different conditions (hospital, ambulatory conditions, in the patient's home, hospice)
6. Levels of palliative care
7. The role of the physiotherapist in the palliative care team
8. Specifics of palliative care for various diseases – (malignant diseases, genetic anomalies)
9. Palliative care of the child
10. Work with the family of a palliative patient
11. Palliative care in the Republic of Croatia

Course name	**Dermatology**
Prerequisites for enrolling in class	
Expected learning outcomes of the course	
After successfully completing the course, students will be able to: 1. Critically judge efflorescences on the skin, 2. Recognize dermatoses caused by allergies, infectious causes, 3. Evaluate therapeutic options in dermatology, 4. Self-assess different skin conditions and explain their peculiarities, 5. Self-assess inherited from infectious dermatoses, 6. To recommend different diagnostic tests in the diagnosis of skin diseases.	
Contents of the course	
1. Introduction to dermatology 2. Dermatovenereological propaedeutics I 3. Dermatovenereological propaedeutics II 4. Therapy in dermatovenerology 5. Efflorescences of the skin I 6. Efflorescences of the skin II 7. Infectious skin diseases I 8. Infectious skin diseases II 9. Allergic skin diseases 10. Skin tumours 11. Diseases of veins and arteries	

Semestre Fifth

Course name	Physiotherapy in rheumatology
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. To assess the benefits of measurements and tests in the framework of physiotherapy assessment of rheumatological patients,
2. Critically assess the goals in the treatment of rheumatological patients,
3. Recommend physiotherapy procedures based on indications and physiotherapy assessment,
4. Argument the opinion about the effectiveness of physiotherapy procedures,
5. Value the importance of teamwork and evidence-based professional monitoring.

Contents of the course

Contents of the course is as follows:

1. Physiotherapy procedures for people with ankylosing spondylitis
2. Physiotherapy procedures for people with rheumatoid arthritis
3. Physiotherapy procedures for people with psoriatic arthritis
4. Physiotherapy procedures for people with reactive and infectious arthritis
5. Physiotherapy procedures for children suffering from rheumatological diseases
6. Physiotherapy procedures for rare rheumatological diseases
7. Physiotherapy procedures for hip osteoarthritis
8. Physiotherapy procedures for knee osteoarthritis
9. Physiotherapy procedures for other osteoarthritis
10. Physiotherapy procedures for people with extra-articular rheumatism
11. Physiotherapy procedures for metabolic diseases
12. Rheumatology tests in physiotherapy
13. Aids for rheumatological patients
14. The role of a physiotherapist in a team when working with rheumatological patients

Course name	Physiotherapy II
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Assess normal posture and normal movement, and functional deviations specific to neurological and psychiatric diseases and geriatric conditions,
2. Determine the goals of physiotherapy treatment of neurological and psychiatric diseases and geriatric conditions,
3. Choose from among the various options the most adequate physiotherapy procedures based on the physiotherapy assessment and the established goal of the physiotherapy treatment,
4. Critically judge the effects of applied therapy, as well as unwanted effects and complications during physiotherapy, through tests and measurements,
5. Argument the opinion on the reasons and methods of application of certain physiotherapy assessment as well as certain physiotherapy procedures,
6. To defend the position related to the reason and method of application of certain physiotherapy assessment as well as certain physiotherapy procedures,
7. Justify the role of the physiotherapist in a interdisciplinary team within neurorehabilitation, psychiatry and with geriatric conditions.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. Physiotherapy in neurology and the physiotherapy process in neurological physiotherapy
3. Neurophysiological foundations in neurological physiotherapy, hierarchical and parallel organization of the central nervous system, central control postural mechanism, characteristics of normal movement
4. Normal automatic postural reactions, balance reactions, voluntary and automated movements, functional movement
5. Analysis of components of normal movement and motor activity: lying, sitting and standing postural set
6. Analysis of transfer activities between postural sets and complex functional activities
7. Functional levels of a person according to the ICF classification
8. Basic principles of application of physiotherapy concepts in adults with neurological impairment.
9. Bobath concept in adults with central damage: review, analysis, treatment and evaluation.
10. Specifics of examination and treatment of persons after cerebrovascular insult, in persons with craniocerebral injuries, problems of spasticity and associated reactions, problem of compensation,
11. Specifics of examination and treatment of persons with Mb. Parkinson's disease and people with multiple sclerosis
12. Specifics of examination and treatment of persons with spinal injuries and persons with peripheral lesions
13. Specifics of examination and treatment of persons with neuromuscular diseases

14. Physiotherapy in psychiatry: physiotherapy process in neurotic disorders, affective disorders, schizophrenia, post-traumatic syndrome, manic syndrome, depressive syndrome, anorexia nervosa and people with psychosomatic disorders
15. Physiotherapy in geriatrics: specifics of the physiotherapy process in geriatrics, and special aspects of group physiotherapy

Course name	Research methods in physiotherapy I
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Establish a hypothesis based on the research objectives
2. Prepare a proposal for processing and presenting results based on hypothesis and data
3. Choose an appropriate statistical test according to the type of data obtained from the research
4. Compare different ways of presenting research results
5. Present the research results in an appropriate manner with regard to the type of data and the hypothesis
6. Valorise the use of individual measures of central tendency and measures of variability for different types of data in research results
7. To judge the statistical and clinical significance of the results of physiotherapy intervention

Contents of the course

Contents of the course is as follows:

1. Scientific approach to research
2. Qualitative and quantitative research
3. Goal and hypothesis - foundations of research organization
4. Types of data and outcome measures in research
5. Introduction to statistical data processing
6. Basic concepts of probability
7. Measures of central tendency and measures of variability
8. Normal distribution and other types of distributions
9. Standardized results (z-values, centiles, deciles, quartiles)
10. Statistical and clinical significance of research results
11. t-test
12. chi-square test
13. Correlation
14. Input and organization of data for processing with a statistical program
15. Ways of presenting research results in a research report

Course name	Physiotherapy skills I
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Assess the state of the basic functional patterns of movement in children and adults within the framework of the physiotherapy assessment of patients with congenital or acquired lesions of the central nervous system,
2. Choose the option of hands-on treatment based on the assessment of function and structure and the established goal of neurofacilitation treatment,
3. Plan basic facilitation techniques aimed at improving functional movement in activities of daily life,
4. Develop basic early intervention and early rehabilitation procedures for individual patients in order to reduce early and late consequences due to damage to the central nervous system,
5. Valorise the functional effects of performed neurofacilitation procedures through tests and measurements in accordance with evidence-based practice.

Contents of the course

Contents of the course is as follows:

1. Features, principles and theoretical origins of the Bobath concept and other neurodevelopmental concepts and their scientific basis
2. Basics of postural control and postural examination with an intact central nervous system
3. Analysis of variations of normal movement/patterns in an intact central nervous system
4. Features of voluntary, automatic, automated and reflex movement
5. Basics of assessment of function and structure-tests and measurements in neurological rehabilitation
6. Pathological patterns and signs of initiation in children and adults with damage to the central nervous system
7. Early and late consequences of damage to the central nervous system
8. The role and goals of early intervention and rehabilitation
9. Positioning and transfers
10. Basics of neurofacilitation hands on treatment aimed at functional movement in activities of daily life
11. Use of aids in neurological patients - advantages and disadvantages
12. The role of the physiotherapist in the interdisciplinary team in the rehabilitation of the neurological patient
13. Adoption of recent scientific knowledge - review of databases
14. Significance and role of physiotherapists in patient education

Course name	**Physiotherapy in pediatrics**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Assess the typical (normal) motor and sensory development of the child,
2. Determine deviations by type,
3. Choose an appropriate physiotherapy intervention in working with children,
4. Critically judge the Vojta concept.

Contents of the course

Contents of the course is as follows:

1. Laws, characteristics and stages of normal sensorimotor development
2. Encouraging normal sensorimotor development and neurodevelopmental concepts
3. Deviations from normal motor development
4. Perinatal factors, prematurity, cerebral palsy
5. Measuring tests and instruments - area of cerebral palsy, sensory and cognitive impairments
6. Sensory, sensory integration and sensory integration dysfunction
7. Autism and pervasive disorders
8. Physiotherapy for muscular dystrophies in children
9. Respiratory physiotherapy in bronchial asthma and cystic fibrosis

Course name	Clinical practice III
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Assess functional and structural deviations for people with disorders and diseases of the cardiovascular and respiratory systems and people with injuries, diseases, damage and specific conditions of the musculoskeletal system,
2. Determine the goals of physiotherapy treatment for the mentioned conditions,
3. Choose from among the various options the most adequate physiotherapy procedures based on the physiotherapy assessment and the established goal of the physiotherapy treatment,
4. Critically judge the effects of applied therapy, as well as unwanted effects and complications during physiotherapy, through tests and measurements,
5. Argument an opinion regarding the reasons and methods of applying a certain physiotherapy assessment as well as certain physiotherapy procedures,
6. To defend the position related to the reason and method of application of certain physiotherapy assessment as well as certain physiotherapy procedures,
7. Conduct effective communication with all team members.

Contents of the course

Contents of the course is as follows:

1. Physiotherapy in cardiology: Physiotherapy assessment in people with disorders and diseases of the cardiovascular system. Physiotherapy process in the intensive care unit and after cardiac surgery: installation of pacemaker, heart bypass and after heart transplantation. Physiotherapy process in people with cardiovascular system dysfunction
2. Physiotherapy in pulmonology: Physiotherapy assessment of people with disorders and diseases of the respiratory system. Physiotherapy process in persons with respiratory system dysfunction
3. Physiotherapy in orthopaedics: Physiotherapy assessment: special tests and measuring instruments for determining disorders of the musculoskeletal system. The use of orthoses and prostheses in congenital and acquired orthopaedic diseases and the use of electronic aids and aids in the activities of the patient's daily life. Basic elements of the application of the PNF concept in orthopaedics
4. Physiotherapy in traumatology: Physiotherapy assessment: special tests and measuring instruments for determining disorders of the musculoskeletal system. Physiotherapy process for people who have experienced bone-joint trauma. Basic elements of the application of the PNF concept in traumatology. Physiotherapy process in people with muscle rupture and ligament rupture
5. Application of orthoses and prostheses in amputations, prosthetics of the lower and upper limbs: selection of the type of prosthesis, preparation for prosthetic supply and prosthetic supply
6. Physiotherapy in sports medicine: Physiotherapy assessment: special tests and measuring instruments for determining disorders of the musculoskeletal system in sports. Physiotherapy process in overexertion syndrome. Basic elements of the application of the PNF concept in sports medicine. Application of physiotherapy procedures in the prevention of injuries in sports

7. First aid in sports. Application of orthoses, different forms of bandages, adaptive and protective means in the physiotherapy and training process
8. Physiotherapy in rheumatology: Physiotherapy assessment: special tests and measuring instruments for determining disorders of the musculoskeletal system in rheumatic diseases and disorders. Physiotherapy process for people suffering from rheumatic diseases

Semestre Six

Course name	Vestibular rehabilitation
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Assess the COURSE's condition based on the physiological parameters of motor tests,
2. Master practical skills in performing various diagnostic and therapeutic procedures,
3. Choose the most adequate method of physiotherapy assessment and intervention,
4. Design individually adapted physiotherapy programs using vestibular exercises and modern techniques and concepts in physiotherapy, respecting indications and contraindications.
5. Judge the possible adjustments of rehabilitation protocols within the scope of physiotherapy treatment based on the results of the physiotherapy assessment,
6. Evaluate the results of the performed physiotherapy process and performed physiotherapy intervention,
7. Argument the opinion about the effectiveness of physiotherapy procedures,
8. Value the importance of teamwork and evidence-based professional monitoring.

Contents of the course

Contents of the course is as follows:

1. Functional anatomy of the vestibular sense
2. Nystagmus and vestibulo-ocular reflex
3. Vestibular diagnostics
4. Causes, classification and clinical manifestations of dizziness
5. Benign Paroxysmal Positional Vertigo (BPPV)
6. Acute vestibular syndrome
7. Persistent postural-perceptual dizziness
8. Ménière's disease
9. Bilateral vestibulopathy
10. Treatment of dizziness
11. Vestibular rehabilitation (VR)
12. Organization of the VR process
13. The role of the physiotherapist in the process of vestibular rehabilitation
14. Factors of success and failure of vestibular rehabilitation

Course name	Physiotherapy skills II
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Assess the state of the basic functional patterns of movement and structure within the framework of the physiotherapy assessment of patients with neuromuscular dysfunctions,
2. Determine the goals of physiotherapy treatment based on the PNF concept,
3. Choose from various options the most adequate therapeutic exercise based on the assessment of function and structure and the established goal of physiotherapy treatment,
4. Critically judge the functional effects of the implemented proprioceptive neuromuscular facilitation procedures through tests and measurements,
5. To argue an opinion regarding the reasons and methods of applying certain physiotherapy assessments as well as certain proprioceptive neuromuscular facilitation procedures in patients with neuromuscular dysfunctions,
6. To defend the position related to the reason and method of application of certain physiotherapy assessment as well as certain proprioceptive neuromuscular facilitation procedures in patients with neuromuscular dysfunctions.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. Functional movement
3. Proprioceptive neuromuscular facilitation - features, principles and theoretical origins, and scientific basis
4. Proprioceptive neuromuscular facilitation – treatment philosophy
5. Basic elements of facilitation
6. Basic movement models
7. Proprioceptive and exteroceptive stimuli
8. Techniques used in PNF
9. Direct application of therapeutic procedures on the patient
10. Indirect application of therapeutic procedures on the patient
11. Walk
12. Assessment
13. Activities of daily living
14. Facial rehabilitation

Course name	Research methods in physiotherapy II
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Plan simpler research,
2. Create a research plan with a plan of phases of the research process,
3. Valorise different sources of information when searching the literature,
4. Choose an appropriate research instrument,
5. Design the process of data collection and processing in research with the selection of appropriate outcome measures,
6. Write a professional or scientific paper with research results according to the methodological rules of paper writing.

Contents of the course

Contents of the course is as follows:

1. Introduction to the methodology of scientific research - basic concepts
2. Significance of research for the development of physiotherapy
3. Overview of the research process
4. Types of research design
5. Sources of professional literature - availability and relevance of individual sources of information
6. Defining goals and research questions
7. Population and sample
8. Sources and types of data in research, selection of appropriate outcome measures
9. Defining variables and measurement scales
10. Methods of data collection in research - research instruments
11. Metric characteristics of research instruments
12. Independent research
13. Processing and interpretation of research results
14. Types and structure of professional and scientific reports
15. Methods of dissemination of research results

Course name	**Physiotherapy in gynaecology**
Prerequisites for enrolling in class	
Expected learning outcomes of the course	
After successfully completing the course, students will be able to: 1. Assess the musculoskeletal system of the pregnant woman, 2. Determine deviations in the performed measurement tests, 3. Plan physiotherapy interventions in the antenatal, natal and postnatal period, 4. Review the effects of physiotherapy interventions.	
Contents of the course	
Contents of the course is as follows: 1. Assessment of the musculoskeletal system during pregnancy 2. Antenatal and natal preparation of the pregnant woman 3. The need for physiotherapy in the postnatal period 4. Puerperium 5. Urogenital physiotherapy	

Course name	**Robotic neurorehabilitation**
Prerequisites for enrolling in class	
Expected learning outcomes of the course	
After successfully completing the course, students will be able to: 1. Distinguish robots for neurorehabilitation, 2. Assess the patient who is for robotic neurorehabilitation, 3. Compare and describe measurements at the beginning and end of the therapeutic cycle, 4. Adapt the application of the robot to the patient, 5. Design the entire physiotherapy procedure.	
Contents of the course	
Contents of the course is as follows: 1. Introductory lecture 2. Robotics in neurorehabilitation 3. Types of robots used in practice 4. Indications for robotic neurorehabilitation 5. Contraindications for robotic neurorehabilitation 6. Robotic neurorehabilitation in children 7. Robotic neurorehabilitation in adults 8. Tests and measurements in robotic neurorehabilitation 9. Setting short-term and long-term goals in robotic neurorehabilitation 10. Plan and program of physiotherapeutic approach 11. Evaluation of the obtained results after robotic neurorehabilitation 12. Writing the final opinion	

Course name	Clinical practice IV
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. To evaluate functional and structural deviations for people with disorders and diseases of the neurological system and in paediatrics, gynecology and obstetrics, oncology, psychiatry and geriatrics,
2. Determine the goals of physiotherapy treatment for people with disorders and diseases of the neurological system and in paediatrics, gynecology and obstetrics, oncology, psychiatry and geriatrics,
3. Choose from among the various options the most adequate physiotherapy procedures based on the physiotherapy assessment and the established goal of the physiotherapy treatment,
4. Critically judge the effects of applied therapy, as well as unwanted effects and complications during physiotherapy using tests and measurements,
5. Argument an opinion regarding the reasons and methods of applying a certain physiotherapy assessment as well as certain physiotherapy procedures,
6. To defend the position related to the reason and method of application of certain physiotherapy assessment as well as certain physiotherapy procedures,
7. Conduct effective communication with all team members.

Contents of the course

Contents of the course is as follows:

1. Physiotherapy in neurology: Physiotherapy assessment of people with disorders and diseases of the neurological system. Physiotherapy process in neurological physiotherapy. Basic elements of applying the Bobath concept for adults with damage to the central nervous system
2. Physiotherapy in paediatrics: Physiotherapy assessment of conditions and diseases that affect the normal sensorimotor development of a child. Physiotherapy process for conditions and diseases that affect the normal sensorimotor development of the child. Basic elements of the application of physiotherapy concepts in children: neuro-developmental treatment according to the Bobath concept, early kinesiological diagnostics and therapy according to Vojta, Halliwick concept. Team cooperation and education of parents and team members
3. Physiotherapy in obstetrics and gynecology: Physiotherapy assessment and physiotherapy process after gynecological operations, pain in the pelvis in 1997, anatomical and physiological changes of the urogenital system and post-menopausal problems
4. Physiotherapy in oncology: Physiotherapy assessment of oncology patients. Physiotherapy process for people suffering from and being treated for oncological diseases (tumour diseases of the head, neck, spine). Physiotherapy process in people after surgical treatment of breast tumours. Physiotherapy process for people suffering from and treated for tumours of the digestive and reproductive system. Physiotherapy process in childhood tumours
5. Physiotherapy in psychiatry: Physiotherapy assessment and physiotherapy process in neurotic disorders, affective disorders, schizophrenia, post-traumatic syndrome, manic syndrome, depressive syndrome, anorexia nervosa and people with psychosomatic disorders

6. Physiotherapy in geriatrics: Physiotherapy assessment and physiotherapy process in elderly people

Course name	**Sport of people with disabilities**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Create implementation of activities according to user needs,
2. Plan the activities of persons with disabilities,
3. Create a customized exercise program,
4. Manage the user's training process.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. Volleyball for people with disabilities
3. Basketball for people with disabilities
4. Football for people with disabilities
5. Handball for people with disabilities
6. Gymnastics for people with disabilities
7. Judo for people with disabilities
8. Swimming for people with disabilities
9. Equestrian sport for people with disabilities
10. Sitting volleyball for people with disabilities
11. Athletics for people with disabilities
12. Repetition of material

Course name	Starting an entrepreneurial venture
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Understand entrepreneurship as a scientific and social phenomenon,
2. Analyse the business environment and formulate a market entry strategy,
3. Assess the Prerequisites for enrolling in classs for the establishment and successful operation of the company,
4. Critically judge the importance of a proactive and entrepreneurial way of thinking for personal development,
5. Interpret and apply knowledge with the purpose of recognizing a business idea and creating a business plan,
6. Create a business plan.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. The nature and importance of entrepreneurship
3. Entrepreneurial way of thinking
4. Entrepreneurial strategies
5. Creativity, business idea and opportunity analysis
6. Sources of entrepreneurial ideas
7. Business plan as a set of business policies
8. Marketing plan
9. Organizational plan
10. Financial plan
11. Sources of financing
12. Business angels
13. Subsidies for self-employment
14. Completion of the undertaking

Quality assurance

Course performance is monitored through an anonymous student survey (evaluation of the quality of the classes held).

Course name	Special topics in physiotherapy
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After taking the course, students will be able to:

1. Assess the role of a physiotherapist in a rehabilitation team and the importance of teamwork in physiotherapy,

2. Classify the characteristics of children and persons with developmental disabilities and physical impairments (mental retardation, autistic disorder, visual and hearing impairments),

3. Recommend appropriate physiotherapy treatment for children and persons with developmental disabilities,

4. Choose appropriate physiotherapy exercises in the rehabilitation process of children and persons with developmental disabilities.

Contents of the course

Contents of the course is as follows:

1. Introductory lecture
2. Definition, classification and etiology of mental retardation
3. Definition and classification of problems from the autism spectrum
4. Physiotherapy procedures for children with autistic disorder, visual impairment and hearing impairment
5. Specifics of development and functioning of children and persons with mental retardation
6. Autistic disorder, visual impairments and hearing impairments,
7. Physiotherapy procedures for children and persons with multiple impairments
8. Physiotherapy procedures in children with rare neurological disorders
9. Specifics of physiotherapeutic treatment of children and persons with disabilities
10. The role of the physiotherapist in the rehabilitation team
11. The impact of Vojta therapy on the quality of life of children with neurological deficits
12. Repetition

Course name	**Legislation in healthcare**
Prerequisites for enrolling in class	

Expected learning outcomes of the course

After successfully completing the course, students will be able to:

1. Analyse the organization of the healthcare system of the Republic of Croatia,
2. Review the legal position of physiotherapists in the healthcare system of the Republic of Croatia,
3. Compare the principles of health care,
4. Appreciate the behaviour of physiotherapists in accordance with the Code of Physiotherapeutic Ethics.

Contents of the course

Contents of the course is as follows:

1. Organization of health care in the Republic of Croatia, Part 1
2. Organization of health care in the Republic of Croatia, part 2
3. Health care
4. Principles of health care
5. Health insurance
6. Colloquium (exam)
7. Protection of patients' rights
8. Act on physiotherapy
9. Code of ethics and norms of behaviour in healthcare
10. Code of Physiotherapy Ethics
11. Liability of healthcare professionals
12. Colloquium (exam)