# CATHOLIC UNIVERSITY IN RUŽOMBEROK FACULTY OF HEALTH SCIENCES

Subjects offered in foreign language\*

\*The Catholic University reserves the right to revise, change or cancel subjects whenever considered necessary or desirable.

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## **Department of Nursing**

COURSE TITLE: Biochemistry	
COURSE CODE: 54O1002W	NUMBER OF CREDITS: 2
STUDY LEVEL: BA	SEMESTER: 1st

### **EXPECTED RESULTS:**

Students will acquire the basic knowledge about biochemistry and biochemical process of the disease.

#### THEME OUTLINE:

1. Characteristic of subject. 2. Biological membranes. 3. Characteristics and metabolism of carbohydrates, lipids. Cholesterol. 4. Biological oxidation, creation of the energy, endergonic and exergonic reactions. 5. Proteins. 6. Hormones. 7. Hemoglobin, bilirubin, porphyrins. 8. Vitamins. 9. Enzymology. 10. Tumoural markers. 11. Sampling of biological materials. 12. Methods in clinical Biochemistry.

COURSE TITLE: Clinical seminars 2	
COURSE CODE: 54O1025W	NUMBER OF CREDITS: 3
STUDY LEVEL: BA	SEMESTER: 3 <sup>rd</sup>

#### **EXPECTED RESULTS:**

Students will acquire the skills to practice Nursery in accordance with the Health Ministry Decree MZ SR 364/2005 Z. z.

## THEME OUTLINE:

1. Medicines, injections, infusions, cytostatic, venous and epidural suction secretions. 2. Examination of sight, hearing. 3. Endoscopic examination methods. 4. Transfusion. Parenteral nutrition. 5. Biological material. 6. The nurse and doctors' wards. 7. Puncture. 8. Surgery, wound drains, stoma. 9. Nurse care for the dying person, and the dead body. 10. ECG, defibrillation, intubation, ... 11. Nursing models and their application. 12. Excursion - Centre for Infectious Diseases.

COURSE TITLE: Clinical seminars 4	
COURSE CODE: 54O1048W	NUMBER OF CREDITS: 3
STUDY LEVEL: BA	SEMESTER: 2 <sup>nd</sup>

#### **EXPECTED RESULTS:**

Students will acquire the skills to practice Nursery in accordance with The Health Ministry Decree MZ SR 364/2005 Z.z.

#### THEME OUTLINE:

- 1. Individualized care in selected clinical workplaces. 2. The providing of individual nurse care in outpatient health care. 3. Implementation of the prescribed nursing techniques an acute state
- 4. The implementation of the prescribed nursing techniques chronic diseases. 5. The records of health care in the patients' documentation. 6. Education of patients, relatives. 7. Application of the various conceptual models. 8. Practice in health education. 9. Communication. 10. Standards.
- 11. Audit. 12. The educational process and educational plans.

COURSE TITLE: Continuous Professional Training 1	
COURSE CODE: 54O1010W	NUMBER OF CREDITS: 3
STUDY LEVEL: BA	SEMESTER: 1st

#### **EXPECTED RESULTS:**

The aim of the course is to master the nursing techniques in the natural conditions. Acquire the skills to provide care methods in nursing process.

## THEME OUTLINE:

1. Practical mastering of the nursing techniques in natural clinical conditions. 2. Bandage technique. 3. Sterilization and disinfection of the tools. 4. Patient care at the bedside. Personal hygiene of the patient. 5. Serving the food to the patients. Rehabilitation. Measurement of physiological function.

COURSE TITLE: Continuous Professional Training 3	
COURSE CODE:	NUMBER OF CREDITS: 3
STUDY LEVEL: BA	SEMESTER: 3 <sup>rd</sup>

## **EXPECTED RESULTS:**

Gain effectively the nursing techniques in natural conditions.

## THEME OUTLINE:

- 1. Nursing techniques in various workplaces. 2. Nursing techniques in outpatients department.
- 3. Nursing techniques in homecare. 4. Nursing process in ADOS (Agency of homecare). 5. Assessment of needs according to NANDA II.

COURSE TITLE: Continuous Professional Training 5	
COURSE CODE: 54O1053W	NUMBER OF CREDITS: 3
STUDY LEVEL: BA	SEMESTER: 5 <sup>th</sup>

Providing the nursing care in health facilities and outpatients department.

#### THEME OUTLINE:

1. Implementation of the prescribed nursing techniques by patients in acute state and patients with chronic illness. 2. Records about health conditions 3. The implementation of education of patients and their relatives. 4. Process of education and educational plans.

COURSE TITLE: English Language 1	
COURSE CODE: 54O1001Y	NUMBER OF CREDITS: 1
STUDY LEVEL: BA	SEMESTER: 1st

#### **EXPECTED RESULTS:**

The goal is to encourage students to work independently with foreign language texts.

## THEME OUTLINE:

1. Present Simple, Present Continuous. 2. Admission. Job interview. 3. The hospital team. 4. The nursing profession. Profile of a student nurse. 5. Nursing in the UK. Prepositions of place and movement. 6. Giving instructions via e-mail. 7. Hospital departments. 8. On the ward. 9. Reading: Wheelchairs. A patient record form. Admitting a patient. 10. Florence Nightingale. 11. Pain. 12. Past Simple versus Past Continuous.

COURSE TITLE: English Language 3	
COURSE CODE: 54O1003Y	NUMBER OF CREDITS: 1
STUDY LEVEL: BA	SEMESTER: 3 <sup>rd</sup>

#### **EXPECTED RESULTS:**

Students are taught how to work with foreign language text, how to make good translation and how to improve communication skills.

#### THEME OUTLINE:

Caring for the elderly.
 Researching symptoms.
 Alzheimer's disease.
 A care home.
 Old age and the brain.
 Transfer to a care home.
 Letter of introduction to a care home.
 Nutrition and obesity.
 Vitamins and minerals.
 Food intake.
 Diabetes.
 Language spot: should/shouldn't.

COURSE TITLE: Gerontological Nursing	
COURSE CODE: 54O1046W	NUMBER OF CREDITS: 4
STUDY LEVEL: BA	SEMESTER:

Students define the specifics of care for geriatric patients, geriatric syndromes, peculiarities of diseases in old age.

#### THEME OUTLINE:

1. Terminology in gerontological nursing. 2. History. 3. Prevention. 4. Management. 5. Community care. 6. Social care. 7. Education. 8. Needs. 9. Geriatric syndromes. 10. Care for older people with diseases of the cardiovascular, respiratory, digestive system, kidney and urinary tract. 11. Care for older people with neurological, psychiatric, metabolic endocrine, infectious disease. 12. Care for older people with musculoskeletal diseases, illness of skin, sensory organs, cancer, end-stage of disease.

COURSE TITLE: Law and Legislation	
COURSE CODE: 54O1050W	NUMBER OF CREDITS: 1
STUDY LEVEL: BA	SEMESTER:

## **EXPECTED RESULTS:**

To understand the basic principles of law, social and health legislation, aspects of law.

#### THEME OUTLINE:

1. Basic terminology of law. 2. Human rights. 3. Labor law. 4. Law in health care. 5. Patients' rights, documentation. 6. Health protection and security in work. 7. Administrative proceedings – aspects of law. 8. Case studies. 9. Health care law. 10. Rights and obligations of parents and children. 11. Basics of criminal law. 12. Curing patient without his consent.

COURSE TITLE: Oncological Nursing	
COURSE CODE: 54O1049W	NUMBER OF CREDITS: 4
STUDY LEVEL: BA	SEMESTER:

## **EXPECTED RESULTS:**

Students will adjust information gotten from another subjects into oncological nursing.

## THEME OUTLINE:

1. Characteristics of oncology and oncological nursing. 2. Chemotherapy, radiotherapy and nursing care. 3. Palliative care. 4. Psychological approach. 5. Oncological pain. 6. Peculiarities of treatment in oncology. 7. Particular treatment of older cancer patients. 8. Treatment of

malignancy of the brain, head and neck, skin, breast. 9. Care of malignancy lung. 10. Nursing care in malignant tumours of the gastrointestinal tract. 11. Nursing care in malignant tumours of the urogenital tract. 12. Nursing care in leukemia.

COURSE TITLE: Professional Ethic	
COURSE CODE: 54O1051W	NUMBER OF CREDITS: 2
STUDY LEVEL: BA	SEMESTER:

## **EXPECTED RESULTS:**

Students will analyse contemporary ethical issues in the context of nursing clinical practice and current legislation

## THEME OUTLINE:

- 1. Basic principles of medical ethics. 2. International documents. 3. Moral and ethical dilemmas in health care. 4. Mutilating intervention. 5. Extreme cases in clinical nursing practice. 6. Ethical aspects of psychiatric care 8. Ethical issues and reproductive health. 9. Assisted reproduction, moral and ethical dilemmas. 9. The moral status of the embryo. 10. Animation and fetal pain.
- 11. Treatment of newborns on the edge of viability. 12. Informed consent.

COURSE TITLE: Psychiatric Nursing	
COURSE CODE: 54O1052W	NUMBER OF CREDITS: 4
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

Students will get information about specific nursing care for patients with mental disorders.

## THEME OUTLINE:

1. Specifics of care for patients with mental disorders. 2. Psychological approach to mentally ill patients. 3. Approach to the aggressive patient. 4. Nursing process for psychiatric patients. 5. Therapeutic communication in psychiatric nursing. 6. Role of nurses in the providing patient with psychotropic medications. 7. Electroconvulsive therapy. 8. Psychotherapy and psychoeducation of patient and family members. 9. Care of patients with schizophrenia. 10. The plan of nursing care for a patient with mental retardation. 11. Nursing care for patients with eating disorders, with affective disorder. 12. Organic mental disorders.

COURSE TITLE: Basic theme of the Bible	
COURSE CODE: 52Z1002W	NUMBER OF CREDITS: 2
STUDY LEVEL: BA	SEMESTER:

Students will get information about the biblical books, biblical language, and will create an overview of the essential elements of content of the Bible.

## THEME OUTLINE:

1. Historical and cultural background of Israel and the Old Testament. 2. Literary dimension of the Old Testament. 3. The image of God in the Old Testament. 4. Anthropology of the Old Testament books. 5. Dimensions of Old Testament ethics. 6. Old Testament's Psalms as prayers. 7. Historical and social background of the time of Jesus. 8. Establishment of the Gospels and their literary character. 9. Writings of the Apostle Paul. 10. Figurative language in the New Testament. 11. The New Testament ethics. 12. The new law on the last things.

COURSE TITLE: Basic themes of Theology	
COURSE CODE: 52S1039W	NUMBER OF CREDITS: 2
STUDY LEVEL: BA	SEMESTER:

## **EXPECTED RESULTS:**

The student has to obtain the basic look into the problems of the Christian religion; ability to enter the general socio-religious issues.

#### THEME OUTLINE:

- 1. Is it possible nowadays to know God? A brief look into the possibility of theological learning.
- 2. Basic theological categories and their relationships. 3. Revelation, Magisterium, theology, people of God and theology, dogma. 4. Theological Anthropology. Basic concept. 5. Tension between science and religion. Mutual understanding and cooperation. 6. Basic Christological themes: incarnation as a significant category of Christianity. 7. Christ's Resurrection: historical and theological questions. 8. Sign, symbol the sensitivity of today's man on the symbol and the ability to understand Sacrament and sacramentality. Theology of grace. Man his evil and the possibility of exemption. 9. Direction of humanity extinction or continuation of human existence? Basic eschatological questions. 10. Church. 11. Biblical character of Mary, mother of God. 12. Modern theological themes (ecology, human religiosity today ...)

# **Department of Emergency Healthcare**

COURSE TITLE: Anaesthesiology and Intensive Care	
COURSE CODE: 54R1039W	NUMBER OF CREDITS: 4
STUDY LEVEL: BA	SEMESTER: 2 <sup>nd</sup>

#### **EXPECTED RESULTS:**

Student will gain basic knowledge about anaesthesiology in clinical practice, professional skills in resuscitation and intensive care.

## THEME OUTLINE:

1. Subjects definition, history. 2. Pharmacology of medicaments used in anaesthesiology and intensive care. 3. Local and total anaesthesia. 4. Aesthesis nurse and rescue worker – their role and tasks. 5. Principles in care about critically state of patient, diagnostics and invasive operations. 6. Respiratory system diseases, artificial pulmonary ventilation. 7. Circulating system diseases. 8. Sepsis, septic shock. 9. Liver and kidney diseases. 10. Specifics of anaesthesia and intensive care in paediatrics. 11. Trauma and polytrauma. 12. Neurointensive case, Nutrition of critically ill patients.

COURSE TITLE: Biology	
COURSE CODE: 54R1004W	NUMBER OF CREDITS: 2
STUDY LEVEL: BA	SEMESTER: 1st

### **EXPECTED RESULTS:**

The goal of the subject is to learn basic knowledge connected to general cytology, Cell physiology, molecular biology and general genetics.

## THEME OUTLINE:

1. Cell theory, chemical structure of cell. 2. Cell composition. Prokaryotic, eukaryotic cells. 3. Cytoplasm. Biological membrane. Cell wall. Basics of using microscope. 4. Membrane organelles. 5. Fibrillary organelles. Non-membrane organelles. 6. Intracellular communication. 7. Cell cycle. 8. Molecular biology. The chemical foundations of heredity: DNA, RNA, Genetic code. 9. Transcription, Translation. 10 Autosomal, Gonosome inheritance. 11. Gene interactions. 12. Mutagenesis. Quantitative and Population genetics.

COURSE TITLE: Biochemistry	
COURSE CODE: 54R1003W	NUMBER OF CREDITS: 2
STUDY LEVEL: BA	SEMESTER: 2 <sup>nd</sup>

#### **EXPECTED RESULTS:**

Students will acquire the basic knowledge about biochemistry and biochemical process of the disease. They will learn how to evaluate laboratory results.

#### THEME OUTLINE:

- 1. Characteristics of subjects. Biological and toxicological features of elements and their. 2. Structure and functions of biological membrane, Transport of substances. 3. Characteristics and metabolism of carbohydrates 4. Characteristics and metabolism of lipids. 5. Biological oxidation, creation of the energy, endergonic and exergonic reactions. 6. Structure and functions of proteins.
- 7. Typology and functions of hormones. 8. Structure and function of haemoglobin, bilirubin, porphyries. 9. Vitamins. 10. Enzymology. 11. Preanalytic phase 12. Modern diagnostic and analytical methods in clinical biochemistry.

COURSE TITLE: Clinical Practice 1	
COURSE CODE: 54R1016W	NUMBER OF CREDITS: 3
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

Students will learn how to use nursing techniques. They will also learn how to implement knowledge into practical professional activity.

## THEME OUTLINE:

1. Patient measurement and monitoring. 2. Patient hygiene. 3. Principles of desinfection, sterilization. 4.Oxygen therapy. Forms of medicaments and ther application. 5. Injection application od medicaments, capillary blood sampling. 6. Blood sampling for medical examination, Laboratory blood test 7. Preparation of infusion, transfusionm, Parenteral nutrition. 8. Enteral nutrition, Enterálna výživa, diets. 9. Wound treatment, bandage and fixative techniques. 10. Instruments and tools. Primary and secondary patient medical examination, Evaluation scales. 12. Respiratory system care. Immobilization and transport instruments. Defibrillator and its use.

COURSE TITLE: Clinical Practice 2	
COURSE CODE: 54R1029W	NUMBER OF CREDITS: 3
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

Students will learn how to use nursing techniques. They will also learn how to implement knowledge into practical professional activity.

#### THEME OUTLINE:

1. Current state of life function by injured patients. 2. Anamnesis and patient examination 3. Principles of treatment and transport of patient.4. Concrete intervention at Intensive Care Unit, at traumatology, at labour ward, at neurosurgery. 5. Needs conncted to emergency healthcare.

COURSE TITLE: Clinical Propaedeutic	
COURSE CODE: 54R1015W	NUMBER OF CREDITS:
STUDY LEVEL: BA	SEMESTER:

Students will learn how to examine patient and correctly identify preliminary diagnosis.

#### THEME OUTLINE:

1. Terminology – health, well-being, disease. 2. Health conditions, health and healthy life style. Behaving during the illness.3. Vital functions and scoring systems. 4. Vital rates, Glasgow Coma Scale, trauma score. 5. Anamnesis – medical, nursing and rescue. 6. Physical examination. 7. Primary and secondary examination from head to the foot, indicative neurological examination. 8. Examination according to organ systems, general medical examination. 9. Body surface – skin, hair, nails. 10. Head – skull, face, eyes and sight, ears and hearing, nose, mouth, pharynx, neck. 11. Chest and lung. 12. Cardiovascular system

COURSE TITLE: Continuous Professional Practice 1	
COURSE CODE: 54R1012W	NUMBER OF CREDITS: 2
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

Students will learn nursing techniques, hygiene care procedures, nutrition procedures, mobility techniques, ...

## THEME OUTLINE:

1. Practical skills in professional practice at different departments. 2. Medical documentation. 3. Wound treatment, bandage and fixative techniques. 4. Positioning, transport and supporting techniques. 5. Implementation of urethral catheter and care about permanent catheter 6. Hygienic care 7. Mobility and immobility. 8. Patient monitoring. 9. Assistance by medical operations. 10. Death body care.

COURSE TITLE: Continuous Professional Practice 3	
COURSE CODE: 54R1033W	NUMBER OF CREDITS: 2
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

Students will implement emergency healthcare techniques; take care of patient, demonstrate techniques connected to medicaments application. They will present following legal standards in practice.

## THEME OUTLINE:

1. Practical implementation of nursing and rescue techniques. 2. Needs. 3. Cooperation with The rescue service operational center.4. Cooperation with other emergency services. 5. Team work and rescue team. 5. Equipment for rescue vehicles. 6. Cartography, topography, working with compass and GPS.

COURSE TITLE: Continuous Professional Practice 4	
COURSE CODE: 54R1044W	NUMBER OF CREDITS: 3
STUDY LEVEL: BA	SEMESTER:

Students will implement emergency healthcare techniques, take care of patient, demonstrate techniques connected to medicaments application. Students will follow the instruction of professional departments/workplace.

#### THEME OUTLINE:

1. Equipment for rescue vehicles. 2. Cartography, topography, working with compass and GPS. 3. Anamnesis data and patient examination. 4. State of vital functions by injured patients. 5. Principles for curing and transport of patients. 6. Emergency healthcare needs and sources of their implementation. 7. Cooperation with The rescue service operational center. 8. Cooperation with other emergency services. 9. Manipulation with biological bio.waste and dangerous waste. 10. Stop the bleeding, fracture treatment by using fixation splint. 11. Defibrilation. Gastric probe. 12. Spontaneous delivery of baby.

COURSE TITLE: Continuous Professional Practice 5	
COURSE CODE: 54R1056W	NUMBER OF CREDITS: 2
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

Students will gain the skills of identification correct patient diagnosis and following proper curing. The main goal is to learn how to work with real life situation.

#### THEME OUTLINE:

1. Primary and secondary examination. 2. Curing and transport to the hospital, delivery patient to another healthcare professional. 3. Curing patient with several injuries. 3. - 12. Emegency health care for patient with poltytrauma, fracture, bleeding, in shock, with spinal cord injury chest injury, abdomen injury, with spasm, .....

COURSE TITLE: Disaster Medicine	
COURSE CODE: 54R1058W	NUMBER OF CREDITS: 5
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

Students will learn how to provide emergency healthcare in case of mass accidents.

#### THEME OUTLINE:

1. Disease state identification in case of mass accidents. 2. Management position in disposal of mass accidents. 3. Definition of disaster medicine. 4 -6. Types of injuries and diseases by catastrophes. 7. First aid at the place of disaster. 8. Mass accidents typology. 9. International help. 10 - 12. The role of WHO in disaster medicine.

COURSE TITLE: Emergency Medicine 1	
COURSE CODE: 54R1045W	NUMBER OF CREDITS: 5
STUDY LEVEL: BA	SEMESTER:

Students will gain theoretical information needed to providing emergency health care.

#### THEME OUTLINE:

1. Emergency Medicine in the system of healthcare. 2. Vital functions and their support – anatomy, physiology, blood, and oxygen transport. 3. Practical realisation of professional healthcare activities in emergency medicine and disaster medicine. 4. Dispatching, problem-focus communication. 6-12. Injury and non-injury accidents.

COURSE TITLE: Emergency Medicine 2	
COURSE CODE: 54R1057W	NUMBER OF CREDITS: 5
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

Students will gain theoretical information needed to providing emergency health care.

#### THEME OUTLINE:

1. Classification of the injured patient. 2. Principles of urgent basic and extended support for life functions. 3. Basic lifesaving practices and skills. 4. Cardiopulmonary-cerebral resuscitation. 4. Special procedures for injuries in new-borns, children and pregnant women. 5. Acute coronary syndrome and cardiac arrest. 6. Severe heart rhythm disorders. 7. Breathing disorders. 8. Stop breathing. 9. Disorders of consciousness. 10. Sudden stroke. 11. - 12. Case studies.

COURSE TITLE: Emergency Healthcare (Paramedic science) 1	
COURSE CODE: 54R1023W	NUMBER OF CREDITS: 5
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

The main goal of the subject is to stmiulate reallife situations in emergency heathcare and to pracice rescue interventions.

## THEME OUTLINE:

1. Organization of the departure of rescue team. 2. Transport and fixation facilities. 3. Patient examination. 4. Anamnesis. 5. Emergency Care Devices. 6. Initial and secondary examination of the affected person. 7. -12. Emergency health care for a patient with polytrauma, with fractures, with bleeding, with shock of unknown aetiology, and spinal cord injury, chest, abdominal, unconscious patient, craniocerebral trauma.

COURSE TITLE: Emergency Healthcare (Paramedic science) 2	
COURSE CODE: 54R1035W	NUMBER OF CREDITS: 5
STUDY LEVEL: BA	SEMESTER:

The main goal of the subject is to stmiulate reallife situations in emergency heathcare and to pracice rescue interventions.

#### THEME OUTLINE:

1. injured by electricity and lightning bolt, 2. with a disturbance of consciousness. 3. with stroke, 4. with chronic respiratory insufficiency, 5. with acute respiratory insufficiency, 6. with ischemic heart disease, 7. with diabetes, 8. with allergic reaction, 8. after drowning. 9. Childbirth out of the hospital (care for the baby and the new-born). 10. Cardiopulmonary resuscitation out of the hospital. 11. Patient care with acute psychosis. 12. Cardiopulmonary resuscitation.

COURSE TITLE: Emergency Healthcare (Paramedic science) 3	
COURSE CODE: 54R1046W	NUMBER OF CREDITS: 5
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

Students will gain the practical skills in model situation stimulating real rescue intervention.

#### THEME OUTLINE:

1.Section and treatment of patients with multiple injuries. 2 - 12. Emergency health care for a patient with polytrauma, with fractures, with bleeding, in shock of unknown aetiology, spinal injuries, chest injury, abdominal trauma, unconsciousness, craniocerebral injury, convulsions, intoxicated patient.

COURSE TITLE: Emergency Healthcare (Paramedic science) 4	
COURSE CODE: 54R1059W	NUMBER OF CREDITS: 5
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

Students will gain the practical skills in model situation stimulating real rescue intervention.

#### THEME OUTLINE:

1. Emergency healthcare for a patient with a cerebral vasoconstriction disorder. 2. Emergency healthcare for a patient with chronic respiratory insufficiency. 3. Emergency healthcare for a patient with acute respiratory insufficiency. 4. Emergency healthcare for a patient with ischemic heart disease. 5. Emergency healthcare for a patient with diabetes. 6. Emergency healthcare for a patient with an allergic reaction. 7. Emergency patient care after heating. 8. Childbirth out of the hospital (care for the baby and the new-born). 9. Cardiopulmonary resuscitation out of the hospital. 10. Patient care with acute psychosis. 11. Cardiopulmonary resuscitation.

COURSE TITLE: English Language 1	
COURSE CODE: 54R1013Y	NUMBER OF CREDITS: 1
STUDY LEVEL: BA	SEMESTER:

The mail goal of the subject is learn students how to work with material in foreign language, how to translate it and how to communicate properly in foreign language. Students will gain specific terminology.

#### THEME OUTLINE:

1. Presentation of subject English Language 1, vocabulary - anatomy. Grammar - Present Simple. Reading a scientific Text - Body of a Man. 2. Professional phraseology in human anatomy. Conversation about anatomy of the human body. 3. Vocabulary - Skeleton, bones, joints, Grammar - Present Continuous. 4. Professional phraseology and conversation. Grammar exercises. 5. Vocabulary - injuries. Grammar - Past Simple 6. Specific phraseology and conversation about injuries . Allergy. . Conversation with patient. 7. Vocabulary - medicines and treatment. Grammar - Past Continuous. 8. Expert phraseology and conversation within the topic: medicaments and urgent treatment. 9. Vocabulary - treatment and first aid. Grammar - Present Perfect. 10. Expert phraseology and conversation from the history and current of the first aid, the contents of the first aid kit and the rescue service vehicles. 11. Vocabulary - the danger to life. Grammar - Present Perfect Continuous. 12. Phraseology and conversation on the topic of danger, calming and saving the patient.

COURSE TITLE: English Language 2	
COURSE CODE: 54R1025Y	NUMBER OF CREDITS: 1
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

The mail goal of the subject is learn students how to work with material in foreign language, how to translate it and how to communicate properly in foreign language. Students will gain specific terminology.

#### THEME OUTLINE:

1. Presentation of subject English Language 2, vocabulary – injuries, treatment. Grammar - Present Perfect Continuous x Past Continuous. Reading a scientific Text – The work of healthcare professional. 2. Professional phraseology about injuries and treatment. Conversation. 3. Vocabulary - Blood circulation and breathing. Grammar – Past Perfect. 4. Professional phraseology and conversation. Grammar exercises. 5. Vocabulary – types of injuries, bleeding. Grammar – Past Perfect Continuous 6. Specific phraseology and conversation about providing healthcare. 7. Vocabulary - Poisoning and biting. Grammar – Future Simple. 8. Expert phraseology and conversation within the topic: poisoning and injuries made by animals and human. 9. Vocabulary – appearance, tetter, blisters. Grammar – Future Continuous 10. Expert phraseology and conversation about the rescue vehicles and ambulance. 11. Vocabulary - vascular stroke. Grammar – Future Perfect and Future Perfect Continuous. 12. Phraseology and conversation with patient.

COURSE TITLE: English Language 3	
COURSE CODE: 54R1037Y	NUMBER OF CREDITS: 1
STUDY LEVEL: BA	SEMESTER:

The mail goal of the subject is learn students how to work with material in foreign language, how to translate it and how to communicate properly in foreign language. Students will gain specific terminology.

#### THEME OUTLINE:

1. Presentation of subject English Language 3, Symptoms and causes in relation to diseases. 2. Scientific phraseology about symptoms and their causes, which are the most common. 3. Heart attack- Symptoms and Causes. 4. Sudden Stroke - Symptoms and Causes. 5. Oncological Diseases - Symptoms and Causes. 6. Fractures, bruises, wrinkles and depression - symptoms and causes. 7. Breathing disorders - symptoms and causes. 8. Eating disorders and digestion - symptoms and causes. 9. Bleeding - Symptoms and Causes. 10. Fever, tremor, chills - symptoms and causes. 11. Poisoning - Symptoms and Treatment. 12. Motion sickness - symptoms and causes.

COURSE TITLE: English Language 4	
COURSE CODE: 54R1049W	NUMBER OF CREDITS: 1
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

The mail goal of the subject is learn students how to work with material in foreign language, how to translate it and how to communicate properly in foreign language. Students will gain specific terminology.

#### THEME OUTLINE:

1. Presentation of subject English Language 4. Symptoms and causes in relation to diseases and solution of situations. 2. Scientific phraseology about symptoms and their causes and neurological diseases. 3. Excessive use of alcohol and other narcotics - symptoms and causes. 4. to 12. Conversation - solving situations in which one student plays the role of a patient with a diagnosis - he or she complains, communicates, begs ... and the other student plays a medical help. Situations are in the classroom under the supervision of the teacher and in the presence of other students who can join the discussion.

COURSE TITLE: Gynaecology and Obstetrics	
COURSE CODE: 54R1040W	NUMBER OF CREDITS: 4
STUDY LEVEL: BA	SEMESTER:

## **EXPECTED RESULTS:**

Get a thorough knowledge of gynaecology and obstetrics, know how to recognize urgent conditions in prenatal care, diagnose them correctly, suggest therapy, treatment, and provide urgent health

and life support in urgent situations.

#### THEME OUTLINE:

1. Characteristics of the subject, interdisciplinary position. 2. Anatomy of female genitals. 3. Disorders of the development of female genital organs. Physiology of a woman. 4. Examination methods in gynaecology and obstetrics. 5. Sexual life of a woman and its disorder. Planned parenthood. 6. Menstrual cycle disorders. 7. Endometriosis. Tumours of female genitals and breasts. 8. Special cases s in gynaecology. 9. Physiological pregnancy and childbirth. 10. Maternal impairment. Risk pregnancy. 11. Irregularity of 3rd Birth.12. Sudden events in pregnancy, during childbirth and postpartum.

COURSE TITLE: Internal medicine	
COURSE CODE: 54R1036W	NUMBER OF CREDITS: 4
STUDY LEVEL: BA	SEMESTER:

## **EXPECTED RESULTS:**

Knowledge of the clinical picture (subjective and objective symptoms) of internal diseases, their diagnosis and treatment.

#### THEME OUTLINE:

1. Characteristics of the subject. 2. Main symptoms of internal diseases. 3. Correction of the circulation system. 4. Respiratory system disorders, tuberculosis. 5. Endocrine system diseases. 6. Diabetes mellitus. 7. Fundamentals of Nephrology. 8. Gastrointestinal disorders. 9. Fundamentals of haematology and transfusion. 10. Basics of Rheumatology and Immunology. 11. Acute states in internal medicine. 12. Physical causes of the disease.

COURSE TITLE: Law and Legislation	
COURSE CODE: 54R1054W	NUMBER OF CREDITS: 1
STUDY LEVEL: BA	SEMESTER:

## **EXPECTED RESULTS:**

Students will learn law and legislation connected to to work in the field of emergency healthcare.

## THEME OUTLINE:

1. Basic legal concepts. 2. Labour law of healthcare workers. 3. Labour-law liability for damage. 4. Criminal liability for damage. 5. Legal aspects of health care. 6. The legal position of a health care professional. 7. Health standards, patients' rights and health documentation. 8. Protection and promotion of public health. 9. Safety and health at work. 10. Administrative procedure - legal aspects. 11. Case clinical trials. 12. Basic Human Rights and Freedoms.

COURSE TITLE: Paediatrics	
COURSE CODE: 54R1031W	NUMBER OF CREDITS: 4
STUDY LEVEL: BA	SEMESTER:

The student will learn how to recognize childhood diseases, in different age groups. They will learn also about the therapeutic procedures.

#### THEME OUTLINE:

1. Characteristics of subject, Historical Development, Interdisciplinary Position, Child Physiology. 2. Physiology and pathology of neonatal period. 3. Children's age, nutritional needs, nutritional disorders, digestive tract diseases. 4. Immune system disorders - allergy, autoimmunity, immunodeficiency. 5. Diseases of the circulatory system. 6. Diseases of the respiratory system. Infectious diseases of childhood. 8. Neurological diseases of childhood. 9. Diseases of the endocrine system. Diseases of the eyes and the skin.

COURSE TITLE: Professional Ethics	
COURSE CODE: 54R1055W	NUMBER OF CREDITS: 1
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

The student will gain knowledge about the latest approaches in the area of ethics and decision making in the area of patient care.

#### THEME OUTLINE:

1. Basic Principles of Medical Ethics. 2. Code of Ethics and Medical Rescue Requirements. 3. International documents in the field of bioethics and health ethics. 4. Ethics and communication in emergency health care. 5. The process of obtaining informed consent. 6. Moral-ethical dilemmas in health at the beginning of life. 7. Ethics and First Aid. 8. Ethics and accidents with mass disability. 9. Ethics of transplants. 10. Ethics at the end of life - euthanasia, vaginal treatment, failure to provide treatment to the dying. 11. Patient's Rights. 12. Ethics and coercive means in health care.

COURSE TITLE: First Aid	
COURSE CODE: 54R1021	NUMBER OF CREDITS:
STUDY LEVEL: BA	SEMESTER:

## **EXPECTED RESULTS:**

Students will learn how to provide first aid.

#### THEME OUTLINE:

1. Introduction to the subject, basic concepts of first aid. 2. Pre-emergency urgent care. 3. System, organization, legal aspects and general principles of first aid. 4. Organization, techniques and procedures of first aid in case of mass accidents and exceptional situations (material equipment and demonstration). 5. History, stages, and procedures for urgent cardiopulmonary resuscitation. 6. Emergency resuscitation algorithms in adults and children. 7. First Aid in Sudden Conditions and

First Aid Training. 8. First aid in gynaecology and obstetrics. 9. Complications in resuscitation. 10. Ethical problems in resuscitation. 11. The most common types of poisoning and first aid in these cases.

COURSE TITLE: Selected Theological Topics 1	
COURSE CODE: 04Z2001W	NUMBER OF CREDITS:
STUDY LEVEL:	SEMESTER:

#### **EXPECTED RESULTS:**

The aim is to deepen the knowledge of students of general theology and to learn about the origins of Catholic anthropology.

## THEME OUTLINE:

1. Clarification of basic concepts. Man in a state of illness and his relationship to God. 2. God's revelation, the Divine revelation, the Holy Bible. Revelation and disease. The place of illness in the life of the believer. 3. The response of man to God. How disease affects faith and how faith influences attitude to disease. 4. Creation - sickness - calling to perfection. 5. I believe in Jesus Christ, the one-begotten Son of God. Begotten of the Holy Spirit and born of Mary the Virgin, the Son of God became man. 6. The Mysteries of Christ's Life. 7. Ascension from the dead, Come to judge the living and the dead. 8. I believe in the Holy Spirit. We sanctify our lives in both health and illness. 9. Church, Church in God's Plan. 10. Community of saints. Community of believers and a ill person. 11. Mary, Mother of Christ, Mother of the Church. 12. Deletion of Sins

COURSE TITLE: Selected Theological Topics 2	
COURSE CODE: 04Z2004W	NUMBER OF CREDITS:
STUDY LEVEL: BA	SEMESTER:

#### **EXPECTED RESULTS:**

The aim of the lectures is to deepen the knowledge of the students about general theology as well as the knowledge about the relationship of the sacramental life and the health of the Christian.

#### THEME OUTLINE:

1. Liturgy. 2. Easter Holidays in Christianity, Holy Trinity. 3 The sacramental celebration of Easter mystery, the celebration of the liturgy of the Church, the liturgical diversity and unity of mystery. 4 The sacrament of baptism. 5. The Sacrament of Holy confirmation. 6. The Sacraments of Healing 1, The Sacrament of penance and Reconciliation.. 7. The Sacrament of Healing 2,. 8. The Sacraments of Healing 2, The Sacrament of the anointing of the sick. 9. The Sacraments of the service of the community 1, the sanctification of the priesthood. 10. The Sacraments of community service 2, The Sacrament of marriage. 11. Other liturgical celebrations. 12. The Christian funeral, The Last Easter of the Christian.

COURSE TITLE: Selected Theological Topics 3	
COURSE CODE: 04Z2006W	NUMBER OF CREDITS:
STUDY LEVEL: BA	SEMESTER:

The aim of lectures is to deepen knowledge of general theology students, to gain knowledge about human attitudes, human nature, values of life and health in the perception of religion.

## THEME OUTLINE:

1. The dignity of a human person. 2. Man - created in God's image. 3. Human freedom. Freedom and relation to health. 4. Morality of human actions, the morality of passion. 5. Conscience. 6. Facts - human and divine. 7. Sin - definition, division. Can our sin harm the health of our body? 8. Human being and community. Decision-making in the community. 9. Participation in social life. Social justice. Where is my place? 10. Selected Questions from Catholic Social Science. Who cares about us? Does God care about our health? 11. Moral Law. 12. Grace and justification. The need for forgiveness and grace.

COURSE TITLE: Selected Theological Topics 4	
COURSE CODE: 04Z2009W	NUMBER OF CREDITS:
STUDY LEVEL: BA	SEMESTER:

## **EXPECTED RESULTS:**

The aim of the lectures is to deepen the knowledge of students about general theology. The student acquires knowledge about marriage and family from the point of view of Christianity, practical skills in assessing the attitudes of family members to family values and marriage in the context of the patient's and his / her family's relationship to health.

#### THEME OUTLINE:

1. Presentation of the subject, basic notions. 2. Family as the basic cell of society. 3. Types of family. 4. Family dysfunction. 5. Definition of marriage. 6. Legal nature of marriage and its basic types. 7. Definition of marriage consent. Breaches of marital consent. 8. Marital Obstacles. 9. Canonical form of marriage. 10. Mixed marriages and the effects of marriage. 11. Ineligibility of marriage 12. Divorce and the sacraments

COURSE TITLE: Surgery and Traumatology	
COURSE CODE: 54R1028W	NUMBER OF CREDITS: 4
STUDY LEVEL: BA	SEMESTER:
EXPECTED RESULTS:	
On the basis of theoretical knowledge, the student identifies illnesses and abnormal health	

injuries, analyses the symptoms and assesses the need for surgical treatment.

## THEME OUTLINE:

1. Characteristics of the subject. 2. Asepsis of antisepsis in surgery. Anaesthesia. 3. Infections in surgery. 4. Head and spine surgery. Head and spinal injuries - surgical treatment. 5. Disease of the neck. Thyroid gland, parathyroid gland, surgical treatment. 6. Chest surgery. 7. Abdomen surgery 8. Surgery of limbs. 9. Traumatology. 10. Orthopaedics. 11. Paediatric surgery - birth conditions, surgical treatment. 12. Sudden events and shock states in surgery. Rehabilitation in surgery.

## **Department of Radiological Technology**

**COURSE TITLE: Biophysics and radiology** 

COURSE CODE: 54L1003W NUMBER OF CREDITS: 2

STUDY LEVEL: BA SEMESTER: 1st

#### **EXPECTED RESULTS:**

Understanding the basic physical processes undergoing in the biological subject.

Understanding the mechanism of action of the electromagnetic waves various spectra on the biological subject in term of the diagnostic and therapy.

## THEME OUTLINE:

Basic physical processes in the biological subject

the basics of thermodynamics

Fundamentals of Atomic and Molecular Physics

Optics and acoustics

Biophysical properties of organs and tissues

Fundamentals of ionizing radiation physics

Overview of sources of ionizing radiation in medicine

Dosimetry of the sources of ionizing radiation

Biological effects of the ionizing radiation

COURSE TITLE: Radiobiology

COURSE CODE: 54T1004W NUMBER OF CREDITS: 4

STUDY LEVEL: BA SEMESTER: 4th

#### **EXPECTED RESULTS:**

To understand the mechanism of the effect of ionizing radiation on a biological subject when applying medical irradiation.

## THEME OUTLINE:

Fundamentals of Atomic and Molecular Physics

Biological properties of organs and tissues

Fundamentals of ionizing radiation physics

Overview of sources of ionizing radiation in medicine

Biological effects of the ionizing radiation

Basic radiobiological mechanisms

Classification of the ionizing radiation damage

Fractionation of the radiation dose

vxoqvH

Clinical application of the radiobiology knowledge

COURSE TITLE: Radiation protection	
COURSE CODE: 54T1044W	NUMBER OF CREDITS: 4
STUDY LEVEL: BA	SEMESTER: 5st

Understand the main principles of the work with sources of ionizing radiation. Understand the mechanism of the effect of ionizing radiation on a biological subject when applying medical irradiation.

## THEME OUTLINE:

Fundamentals of ionizing radiation physics

Overview of sources of ionizing radiation in medicine

Quantities and units used in the dosimetry of ionizing radiation in medicine

Quantities and units used to estimation of the risk of ionizing radiation in medicine

Devices used for dosimetric measurements

Optimization of the medical exposure and limits

## **Department of Physiotherapy**

COURSE TITLE: Nursing	
COURSE CODE: 54F1010W	NUMBER OF CREDITS: 3
STUDY LEVEL: BA	SEMESTER: 1st

EXPECTED RESULTS: Knowledge: knows the basics of nursing with a focus on rehabilitation and basic nursing care; • Skills: controls the measurement of physiological values and their recording. Gains skills in the practical application of ECG devices and in the use of modern devices associated with nursing and rehabilitation interventions. • Competences: The student masters preventive measures to prevent complications in immobile patients.

THEME OUTLINE: Nursing Nursing as a scientific discipline. Nursing departments, historical view of nursing. National Health Promotion Program. Characteristics of the need for respiration, nutrition, urinary and faecal excretion, hygiene. Characteristics of the need for self-sufficiency and self-care, sleep and rest, pain, physical activity. Satisfying needs by the method of the nursing process. Nursing process management, quality and audit of nursing care. Care for emptying and hygiene of the sick. Pressure ulcer prevention. Eating sick, feeding immobile sick. Working with central oxygen distribution. Measurement of physiological functions and records. Ethical aspects in nursing.

COURSE TITLE: Communication and professional ethics COURSE CODE: 54F1074W NUMBER OF CREDITS:4	

EXPECTED RESULTS: • Knowledge: knows the basics of professional behavior and social communication. • Skills: can apply knowledge and skills in everyday social and professional communication. In clinical practice, he uses communication knowledge, applies communication skills and experience, and applies and improves professional behavior in social interaction with the patient. He can apply practical skills that will help him analyze current ethical issues affecting the field of physiotherapist's work. • Competences: can make independent decisions in the performance so that it adheres to established and beneficial ethical principles - principles.

THEME OUTLINE: Nonverbal communication - division. Non-verbal communication - facial expressions, kinesics, attitudes, gestures, haptics, prexemics. Verbal communication - the function of speech. An interview. Paralinguistics. Empathy and assertiveness. Assertive techniques. Psychotherapeutic approach of a physiotherapist. Evaluation and devaluation. The importance of communication in physiotherapy. Basic principles of medical ethics. Codes of ethics and physiotherapist requirements. International documents in the field of bioethics and research. Moralethical dilemmas in health care at the beginning of life - artificial reproduction, viability, artificial termination of pregnancy, contraception. Ethics and first aid. Ethics and ethics committees. The process of obtaining informed consent. Ethics and workplace relations. Ethics of transplants. Ethics at the end of life - euthanasia, futile treatment, failure to provide treatment to the dying. Patients' rights and ethics. Ethics and communication with the patient Exercises: Non-verbal communication. Non-verbal means of social communication. Categorization of nonverbal expressions. Exterior finish. An interview. Conducting dialogue. Principles of conversation. Shortcomings in verbal communication. Empathy. Assertiveness. Assertive techniques. Evaluation and devaluation. Productivity and non-productivity in communication.

COURSE TITLE: Clinical practice 1	
COURSE CODE: 54F1024W	NUMBER OF CREDITS:3
STUDY LEVEL: BA SEMESTER: 2nd	
EXPECTED RESULTS: • Knowledge: has knowledge of basic nursing care and basic	
physiotherapy examination • Skills: can apply the acquired skills in nursing care within the	

competence of a physiotherapist and performs basic physiotherapeutic examinations. • Competences: can practically handle physiotherapeutic diagnostics in clinical conditions.

THEME OUTLINE: 1. Nursing: Basic nursing care for the sick. Hygienic care, positioning of patients, prevention of pressure ulcers. Emptying. Bed care. Handling with the patient. Dressing technique. Serving food. Monitoring, measuring and recording physiological functions. Work with central oxygen distribution. Attendance at the visit. Principles of drug application. 2. Physiotherapy: Practical application of balneo-, thermo-, mechano- and hydrotherapeutic procedures. Practical application of classical massage sets in prevention and therapy. Measurement of body height and weight. Examination and measurement of ranges of mobility in the joints of the limbs using a goniometer. Examination and measurement of the range of motion of the spine by a measuring tape. Record keeping of joint mobility by SFTR method. Anthropometric measurement of the torso, limbs and their subsequent recording. Practical implementation of forms of passive and active movement with limb fixation and guidance.

COURSE TITLE: Clinical practice 2	
COURSE CODE: 54F1040W	NUMBER OF CREDITS:2
STUDY LEVEL: BA	SEMESTER: 3rd

EXPECTED RESULTS: • Knowledge: has knowledge of basic methods of diagnosis and procedures of movement therapy. • Skills: can apply the acquired skills in basic methods of diagnostics and procedures of movement therapy in physiotherapy. • Competences: can practically handle physiotherapeutic diagnostics in clinical conditions. He applies a medical rehabilitation plan and uses professional communication with the patient, shows assertive and empathetic behavior. Gains erudition in compiling a medical rehabilitation plan.

THEME OUTLINE: 1. Physiotherapeutical diagnostics in clinical practice. - examination and measurement of ranges of mobility in the joints, recording by SFTR method, - examination and evaluation of hypermobility, examination and evaluation of shortened muscle groups, - muscle group weakness testing, use of the Janda Muscle Test - examination of posture, gait and hand grip - record keeping and documentation. 2. Methods of kinesiotherapy in clinical practice. - fitness group and individual exercise, - relaxation, positioning, strengthening exercises, relaxation and mobilization methods, automation exercises, - use of aids, - reeducation of posture in various postural positions, - walking training, walking with aids

COURSE TITLE: Clinical practice 3	
COURSE CODE: 54F1051W	NUMBER OF CREDITS:3
STUDY LEVEL: BA	SEMESTER: 4th

EXPECTED RESULTS: Knowledge: has knowledge of basic methods of diagnostics and procedures of movement therapy in individual medical disciplines. • Skills: can assess the patient's condition, draw up a medical rehabilitation plan and apply kinesiotherapy methods. • Competences: can practically master physiotherapeutic diagnostics in clinical conditions, can apply the acquired skills in nursing care within the competence of a physiotherapist and applies physiotherapeutic examination for the subsequent selection of a suitable method of kinesiotherapy. It acquires a professional approach to patient communication, assertive behavior and empathy.

THEME OUTLINE: Physiotherapeutic diagnostics, compilation of a therapeutic plan, use of kinesiotherapy and physical therapy methods in patients with frequent diagnoses in the given clinical fields: 1. traumatology - kinesiotherapy during injury healing, complications of healing, secondary prevention of the consequences of injury and immobilization, rehabilitation after injury of soft tissues, after injury of bones and joints of limbs, 2. internal medicine - cardiovascular training and musculoskeletal management in ischemic heart disease, 3. neurology - care of a hemiparetic patient and basics of kinesiotherapy according to the Bobath concept 4. surgery - kinesiotherapy in abdominal and thoracic surgery in preoperative care, after surgery and in convalescence, scar

care, complications of healing and inactivity, 5. gynecology and obstetrics - kinesiotherapy in conservative and operative treatment in gynecology, kinesiotherapy during pregnancy and after childbirth.

COURSE TITLE: Continuous Professional Practice 5	
COURSE CODE: 54F1052W	NUMBER OF CREDITS:3
STUDY LEVEL: BA	SEMESTER: 4th

EXPECTED RESULTS: • Knowledge: has knowledge of the procedures of movement therapy according to the nature of the disease and acquire practical skills in assessing the patient's condition, compiling a plan for medical rehabilitation and kinesiotherapy in individual indication areas of medicine. • Skills: can evaluate the patient's condition, compile a plan of medical rehabilitation and kinesiotherapy in individual indication areas of medicine • Competences: applies the acquired skills in physiotherapeutic care of the patient within the competence of the physiotherapist and controls and performs basic physiotherapeutic examinations. Gains erudition in professional communication with the client, assertive behavior and empathy.

THEME OUTLINE: Kinesiotherapy in the indication area of surgery. - kinesiotherapy in preoperative care, principles of post-operative therapy, complications from inactivity, scar care, healing complications, - kinesiotherapy in convalescence, peculiarities of kinesiotherapy in abdominal surgery and thoracic surgery. 2. Kinesiotherapy in the indication area of gynecology and obstetrics - kinesiotherapy in conservative and operative treatment in gynecology, kinesiotherapy in perinatal care. 3. Kinesiotherapy in the indication area of traumatology - kinesiotherapy during injury healing, healing complications, secondary prevention of injury and immobilization, rehabilitation after injury of soft tissues (skin, subcutaneous tissue, fascia, tendons, ligaments, injuries, muscles, , specifics of kinesiotherapy after injuries of the upper and lower extremities. 4. Kinesiotherapy in the indication area of internal medicine - training of the cardiovascular system and locomotor lifestyle in ischemic heart disease 5. Kinesiotherapy in the indication area of neurology - patient care and basics of kinesiotherapy of hemiparetics.

COURSE TITLE: Physiotherapeutic Diagnostics 1	
COURSE CODE: 54F1002W	NUMBER OF CREDITS:4
STUDY LEVEL: BA	SEMESTER: 1st
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EXPECTED RESULTS: • Knowledge: demonstrates theoretical knowledge of orientation on the human body, uses clinical examination procedures in FBLR, masters the examination of muscle imbalance, movement stereotypes and measurement of lengths, circumferences of the limbs and spinal motility. • Skills: masters practical skills in clinical and anthropometric examination in FBLR, assesses muscle imbalance and pathology of movement stereotypes. • Competences: can orientate on the human body, can use selected physiotherapeutic procedures in clinical examinations, can use palpation techniques and analyze muscle imbalance and movement stereotypes.

THEME OUTLINE: Specific diagnostics in rehabilitation, functional approach to diagnostics. Orientation on the human body: anatomical position of man, anthropometric points, names of movements in the joints of the limbs and spine. Clinical examination in FBLR: Anamnesis, subjective examination, objective general and local examination (inspection, palpation). Examination of the quality and quantity of consciousness, examination of speech, patient position, constitution and nutrition. Examination of posture and gait. Anthropometry: measuring the lengths and circumferences of the limbs, chest, thigh. Caliper. Dynamometry. Measurement of spinal motility: Čepoj, Schober, Stibor, Thomayer, Fleche-Forestier, Otto indices. Examination of muscle imbalance. Examination of movement stereotypes.

## COURSE TITLE: Physiotherapeutic Diagnostics 2

COURSE CODE: 54F1016W	NUMBER OF CREDITS:2
STUDY LEVEL: BA	SEMESTER: 2nd

EXPECTED RESULTS: • Knowledge: knows the anatomy and function of individual muscles according to the Muscle Test, can define hypermobility. • Skills: masters the application of the Muscle Test according to the examination of individual weakened and shortened muscles, can apply individual tests of hypermobility. • Competences: can examine shortened and weakened muscles according to the Muscle Test and manages the hypermobility test.

THEME OUTLINE: General characteristics of the Muscle Test. Muscle test of mimic muscles. Lower limb muscle test - hip joint, knee joint, forelegs, foot, toes and thumb. Muscle test - upper limb - shoulder joint, elbow joint, forearm, hand, fingers and thumb. Muscle test - neck, torso, pelvis. Examination of the most commonly shortened muscles. Hypermobility examination.

COURSE TITLE: Physiotherapeutic Diagnostics 3	
COURSE CODE: 54F1028W	NUMBER OF CREDITS:3
STUDY LEVEL: BA	SEMESTER: 3rd

EXPECTED RESULTS: • Knowledge: knows the range of motion of individual joints and can create an SFTR record, masters the theoretical knowledge of postural activity and reactivity, masters the examination procedure in case of musculoskeletal disorders. • Skills: masters the practical use of the goniometer in the examination of range of motion in individual joints, applies the examination of positional reactions and primitive reflexes, masters the examination of the deep stabilization system and can determine the musculoskeletal system, imaging imaging methods of the musculoskeletal system. • Competences: can analyze the range of motion of individual joints, can examine impaired function from a developmental point of view, can gain an overview of muscle breakdown and muscle loops, can analyze imaging tests.

THEME OUTLINE: Goniometry (planes of the human body, SFTR method, SFTR method. Goniometry of the upper limbs - shoulder joint, elbow joint, wrist joint, fingers and thumb. Goniometry of the lower limbs - hip joint, knee joint, ankle joint, fingers and post., reactivity and primitive reflexes Examination of deep stabilization system Examination of functional disorders of the musculoskeletal system Examination of muscle chain and muscle loops Examination of the temporomandibular joint (TMK) Auxiliary examination methods in physiotherapy: EMG, EEG, UZ, RTG, CT, MR.

COURSE TITLE: Physiotherapeutic Diagnostics 4	
COURSE CODE: 54F1042W	NUMBER OF CREDITS:3
STUDY LEVEL: BA	SEMESTER: 4th

EXPECTED RESULTS: • Knowledge: demonstrates the theoretical knowledge of the examination according to the method of R. McKenzie, Brügger, Brunnström, analyzes the algorithm of examination of individual joints of the upper and lower limbs. • Skills: masters the examination according to R. McKenzie, Brügger, evaluates the motor deficit according to Brunnström, analyzes the kinesiological analysis of individual peripheral joints. • Competences: can design treatment by examining the methods, can determine the specific kinesiological analysis of individual peripheral joints.

THEME OUTLINE: Examination according to the author of the therapeutic method R. McKenzie. Examination according to the author of the therapeutic concept of Brügger. Examination according to the author of the therapeutic concept - Brunnström, tests of the quality of movement patterns and balance. Kinesiological analysis and examination algorithm of the upper limb - shoulder joint, elbow joint, wrist joint, hand, fingers and thumb. Kinesiological analysis and algorithm of lower limb examination - hip joint, knee joint, ankle joint, foot, toes and thumb.

	COURSE TITLE: Balneotherapy, Klimatotherapy, Hydrotherapy and Thermotherapy and	
Electrotherapy and phototherapy		
	COURSE CODE: 54F1077W	NUMBER OF CREDITS: 3
	STUDY LEVEL: BA	SEMESTER: 3rd

EXPECTED RESULTS: Knowledge: controls the mechanism of therapeutic action of physical stimuli on the body as well as the effects, indications and contraindications of individual therapies. • Skills: applies individual procedures and monitors their physical effects on the human body, evaluates the possibilities of using individual procedures. • Competences: can design appropriate treatment using individual therapies according to their effect, can analyze the possibilities of their therapeutic use.

THEME OUTLINE: History of physical procedures. Characteristics, division, physical basis of individual procedures. Mechanism of action of procedures. Physiological effects, principle of application and its practical implementation. Indications and contraindications of individual procedures. Balneotherapy: medicinal water-drinking treatments, inhalations, peloids. Bioclimotherapy, Speleotherapy, Meteorosensitivity, Heliotherapy. Thalassotherapy. Thermotherapy: positive and negative. Hydrotherapy: partial and total baths, additive baths. Electrotherapy: flow of electric currents through tissues, I / t curve, electrodiagnostics - electrostimulation, electrogymnastics, direct current (iontophoresis, hydrogalvan, galvanic bath), alternating current - low frequency (diadynamic currents, TENS, Träbert currents, interference frequency group) currents, amplitude modulated currents), high frequency current (shortwave, microwave and ultrawavelength diathermy). Sonotherapy. Magnetotherapy. Phototherapy: infrared and ultraviolet radiation, laser therapy, polarized light-biolamp.

COURSE TITLE: Kinesiology and Pathokinesiology 1	
COURSE CODE: 54F1031W	NUMBER OF CREDITS:3
STUDY LEVEL: BA	SEMESTER: 3rd

EXPECTED RESULTS: Knowledge: knows the basics of motor ontogenesis, understands the dynamics of momentum development related to the gradual maturation of the CNS, knows the development of gross and fine motor skills and posture and their specifics from birth to adulthood. • Skills: can recognize postural and motor disorders of children and the adult population. Can design adequate treatment in the detection of motor and postural abnormalities. Can assess the degree of damage to the will. He is familiar with the issue of infantile cerebral paresis. • Competences: has the ability to analyze and synthesize in the kinesiological analysis and evaluation of the neuromuscular system, based on the principles of ontogenesis and the development of human motor skills.

THEME OUTLINE: Brief subject scheme: 1. Movement as the basic manifestation of living, movement behavior, the impact of movement for life pocesses, , external environment and society, relationships, sport and motion compensation. 2. Connective tissues structure and function: ligament, cartilage, bone. Morfology, physiology, growth and evolution, nutrition, biomechanics, defects and regeneration of individual tissue types. 3. Continuous and contact bone connesctions – structure, movements. 4. Individual joint parts biomechanics nutrition, inervation, joint afference. 5. Pathological changes and individual joint parts regeneration. 6. Muscle tissue- structure, action potenntial and muscle tissue contraction mechanism, myoneural disc, types of muscle tissue. 7. Skeletal muscle- structure, muscle and bone connection. 8. Bursas, sheaths, fascias, vasculat supply, senzoric organs a nerve endings in the muscle, muscle tension and muscle consistency. 9. Functions of muscle tissue in patological conditions, regeneration abilities. 10. Neurone, body, protrusions, receptor, conductive and exciting membrane. 11. Depolarization, excitement, synapse, integration and coding function of the neuron. 12. Output part of the cell, efector, metabolic neuron requirements, damage and possibilities of regeneration of nervous tissue.

COURSE TITLE: Postural correction and Respiratory Physiotherapy	
COURSE CODE: 54F1079W	NUMBER OF CREDITS:4
STUDY LEVEL: BA	SEMESTER: 3rd

EXPECTED RESULTS: Knowledge: has knowledge of the deep stabilization system, the nature, effects and the latest trends in posture correction methods and techniques, has knowledge of respiratory diseases and methods of physiotherapy for respiratory diseases • Skills: can use the knowledge of a deep stabilization system and master the latest methods and techniques for posture correction, can use them in clinical practice; can use modern methods of physiotherapy in respiratory diseases • Competences: masters the latest methods and techniques for posture correction, can use them in clinical practice, uses modern methods of physiotherapy for respiratory diseases in clinical practice

THEME OUTLINE: Brief syllabus: Postural correction Axis organ stabilization system. 2. Spiral dynamics. 3. Muscle balance in the braids of the upper and lower limbs. 4. Muscular torso balance. 5. Muscle balance in muscle chains. 6. Reciprocal relationships in muscles and joints. 7. Reciprocal relations in braids. 8. Reciprocal relationships throughout the body. 9. Disorders of muscle balance and reciprocal inhibition. 10. Pathological compensations. 11. Clinical applications. 12. Therapeutic influence of deep stabilization system. Exercises: Postural stability, correction standing, sitting, lying down, patient manipulation. 2. Spiral involvement of muscles in prototype activities. 3. Examination and treatment options for shortened and weakened muscles of the upper and lower limbs. 4. Examination and treatment options for shortened and weakened torso muscles. 5. Involvement of muscle loops in movement, exercise in open and closed chain. 6. Utilization of reciprocal inhibition in relation to movements in individual joints. 7. Utilization of reciprocal inhibition in upper and lower limb braids. 8. Use of reciprocal inhibition in the axial organ. 9. Detection of agonist and antagonist dysfunction in terms of muscle imbalance and reciprocal inhibition. 10. Detection of pathological compensation through movement stereotypes. 11. Application of means of compensation of muscle imbalance in clinical practice. 12. Conscious activation of the deep stabilization system through kinesiotherapy methods. Respiratory physiotherapy Respiratory physiotherapy - physiological nature and indication approaches, 2. Problems of the upper respiratory tract. 3. Respiratory hygiene techniques. 4. Autogenous drainage. 5. Neurophysiological stimulation of respiration. 6. Wind trainers. 7. Inhalation therapy. 8. Inhalation devices, their principle. 9. Climate therapy. 10. Speleotherapy. 11. Use of breathing apparatus. 12. Physical activity and inactivity and their impact on health.

COURSE TITLE: Methods of Kinesiotherapy 3	
COURSE CODE: 54F1029W	NUMBER OF CREDITS: 3
STUDY LEVEL: BA	SEMESTER: 3rd

EXPECTED RESULTS: • Knowledge: knows neuromuscular techniques, methods based on developmental kinesiology and methods used in the treatment of musculoskeletal disorders. • Skills: practically masters the application of neuromuscular techniques for individual parts of the locomotor system and appropriately uses selected methodologies in impaired locomotor function. • Competences: can analyze impaired motor function and apply subsequent treatment, can apply methods to reeduce the musculoskeletal system.

THEME OUTLINE: Neuromuscular techniques - characteristics of PIR, AGR, RI. Postisometric relaxation and autotherapy - head, neck, torso, upper limb, pelvis, lower limb. Approaches based on ontogenetic development - Vojta's reflexive principle and DNS. Deep stabilization system and Pilates method. Functional disorders of the locomotor system and methods focused on physical education and proper posture - the method of B. Mesendiecková, F. M. Alexandra, M. Feldenkreis. Sensorimotor stimulation method - Freeman method, proprioceptive training, Janda and Vávrová

method. R. Brunkow method and ACT-characteristics and methodical procedure of the exercise. L'udmila Mojžišová's method - treatment of functional female sterility.

COURSE TITLE: Methods of Kinesiotherapy 5
COURSE CODE: 54F1058W NUMBER OF CREDITS:4
STUDY LEVEL: BA SEMESTER: 5th

**EXPECTED RESULTS:** • Knowledge: masters the nature and principle of Proprioceptive Neuromuscular Facilitation and has knowledge of manual treatment of the axial organ. • Skills: practically masters the method of Proprioceptive Neuromuscular Facilitation with the use of movement diagonals and their variants for individual parts, applies manual therapy in terms of mobilization, manipulation and traction of intervertebral joints of the spine and costovertebral joints. • Competences: can use movement reeducation to facilitate movement, can apply manual therapy to block movement segments of the axial organ.

THEME OUTLINE: Proprioceptive Neuromuscular Facilitation (PNF) method - movement diagonals for HK, DK, scapula and pelvis. General characteristics of functional disorders of the spinal joints and manipulative treatment. Manual therapy of functional disorders in the SI joint. Manual therapy of functional disorders in the intervertebral joints of the lumbar spine. Manual therapy of functional disorders in the intervertebral joints of the thoracic spine. Manual therapy of functional disorders in costovertebral joints. Manual therapy of functional disorders in the intervertebral joints of the cervical spine and atlantoccipital joint.

COURSE TITLE: Physiotherapy procedures in clinical disciplines 3

COURSE CODE: 54F1057W

NUMBER OF CREDITS: 4

STUDY LEVEL: BA

SEMESTER: 5th

**EXPECTED RESULTS: •** Knowledge: defines the etiology and etiopathogenesis of diseases in the medical fields of gynecology and obstetrics and pediatrics. He knows the clinical signs of the disease in pediatric patients. He has basic information and knowledge about psychoprofilaxia during pregnancy and care for the mother at six weeks. I know physiotherapeutic procedures in conservative and surgical treatment of the uterus and in functional sterility. • Skills: can select appropriate kinesiotherapy methods and design a rehabilitation program for pediatric patients and in gynecology and obstetrics. He plans a rehabilitation goal, knows how to assess and evaluate rehabilitation treatment. • Competences: can implement kinesiotherapeutic procedures and methodologies for selected diagnoses in gynecology and obstetrics and in pediatric patients. Can design physical therapy and apply patient and parent education.

THEME OUTLINE: Selection of kinesiotherapeutic methods, documentation, evaluation and practical implementation in the field: kinesiotherapy for functional reproductive disorders, functional sterility, conservative therapy of diseases of the female reproductive organs, surgical treatment of female reproductive organs. Physical education during pregnancy, fitness preparation for childbirth, instruction on exercise in the sixth week. Physical education of newborns and infants, regeneration of the organism and reeducation of motor abilities after childbirth. Specifics of rehabilitation in pediatrics, - physiotherapy of children with poor posture and muscle imbalance, physiotherapy for developmental errors and deformities of the musculoskeletal system, physiotherapy for scoliosis.